AN HISTORIC RESOURCES PROTECTION PLAN FOR THE LAKE ERIE COASTAL ZONE

as part of the implementation of the PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM



Submitted to:

Pennsylvania Historical and Museum Commission Bureau for Historic Preservation William Penn Memorial Museum Harrisburg, Pennsylvania 17120

Submitted by:



Northwest Institute of Research

434 West Eighth Street Erie, Pennsylvania 16502

F 157 .E6 W65 1983 pt1



AN HISTORIC RESOURCES PROTECTION PLAN FOR THE LAKE ERIE COASTAL ZONE

as part of the implementation of the PENNSYLVANIA COASTAL ZONE MANAGEMENT PROGRAM

Submitted To:

Pennsylvania Historical and Museum Commission Bureau for Historic Preservation William Penn Memorial Museum Harrisburg, Pennsylvania 17120

Prepared By:

Renata B. Wolynec, Ph.D. David S. Brose, Ph.D.

Submitted By:

Northwest Institute of Research 434 West 8th Street Erie, Pennsylvania 16502

April 1, 1983

The preparation of this report was financed through the Pennsylvania Coastal Zone Management Program under provisions of the Federal Coastal Zone Management Act of 1972, as amended, administered by the Division of Coastal Zone Management, Bureau of Water Resources Management, Pennsylvania Department of Environmental Resources. Matching funds were also provided by the Pennsylvania Historical and Museum Commission.

F157, E6W65 1983 pt. 1 #41512004



ACKNOWLEDGEMENTS

The preparation of this report was financed through the Pennsylvania Coastal Zone Management Program under provisions of the Federal Coastal Zone Management Act of 1972, as amended, administered by the Division of Coastal Zone Management, Bureau of Water Resources Management, Pennsylvania Department of Environmental Resources. Matching funds were also provided by the Pennsylvania Historical and Museum Commission.

This project, like any other, is a product to which many minds have contributed to assure its accomplishments.

Great appreciation is due to the Pennsylvania Historical and Museum Commission and especially to Ms. Brenda Barrett, Mr. William McLaughlin and Kurt Carr. Without such support, this study could not have been carried out.

Deep appreciation is also due to the City of Erie, Office of Policy Planning and Management, especially to Mr. Dennis DelPorto and Mr. Norbert Juniewicz who put at our disposal the necessary information.

Appreciation is extended to the staff who worked diligently on several aspects of the study, especially Carl Frank, Tom Weber and Robyn Combe.

Our gratitude and warmest thanks to the Northwest Institute of Research staff whose diligence and enthusiasm contributed so much to the completion of this study.



TABLE OF CONTENTS

Acknowledgements 1 1.0 INTRODUCTION			Page
1.1	Acknowle	dgements	i
1.2	1.0	INTRODUCTION	1-1
1.3			
1.4 Organization			
1.5 Study Area Boundaries and Description 1-7 1.6 Summary of General Methodology: Consolidating and Identifying Cultural Resources			
1.6 Summary of General Methodology: Consolidating and Identifying Cultural Resources			
### Table 1. ARCHAEOLOGICAL RESOURCES			/
2.0 PART 1: ARCHAEOLOGICAL RESOURCES	1.6		
2.1 Background: Defining Archaeological Data and Methods		and Identifying Cultural Resources	1-13
and Methods	2.0	PART 1: ARCHAEOLOGICAL RESOURCES	2-1
2.1.1 Defining the Past 2-7 2.1.2 Classes of Archaeological Data 2-8 2.1.3 Classes of Objectives 2-10 2.1.4 Discovering Archaeological Data 2-12 2.1.4.1 Survey 2-12 2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Culturés of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous 2-26 2.4 Development of a Predictive Model 2-32 2.4.1 Testing the Model 2-40 2.4.2 Identification of Sensitive Areas for Planning Purposes 2-42	2.1		
2.1.2 Classes of Archaeological Data 2-8 2.1.3 Classes of Objectives 2-10 2.1.4 Discovering Archaeological Data 2-12 2.1.4.1 Survey 2-12 2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Culturés of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous 2-26 2.4 Development of a Predictive Model 2-32 2.4.1 Testing the Model 2-40 2.4.2 Identification of Sensitive Areas for Planning Purposes 2-42		and Methods	2-1
2.1.3 Classes of Objectives 2-10 2.1.4 Discovering Archaeological Data 2-12 2.1.4.1 Survey 2-12 2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Culturés of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous Archaeological Research 2-27 2.4 Development of a Predictive Model 2-32 2.4.1 Testing the Model 2-40 2.4.2 Identification of Sensitive Areas for Planning Purposes 2-42			
2.1.4 Discovering Archaeological Data 2-12 2.1.4.1 Survey 2-12 2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Cultures of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous Archaeological Research 2-27 2.4 Development of a Predictive Model 2-32 2.4.1 Testing the Model 2-40 2.4.2 Identification of Sensitive Areas for Planning Purposes 2-42	2.1.2	Classes of Archaeological Data	2-8
2.1.4 Discovering Archaeological Data 2-12 2.1.4.1 Survey 2-12 2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Cultures of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous Archaeological Research 2-27 2.4 Development of a Predictive Model 2-32 2.4.1 Testing the Model 2-40 2.4.2 Identification of Sensitive Areas for Planning Purposes 2-42	2.1.3	Classes of Objectives	2-10
2.1.4.2 Excavation 2-13 2.1.5 Judging the Significance of a Site 2-14 2.2 The Prehistoric Cultures of the Area 2-17 2.2.1 Paleo-Indian 2-17 2.2.2 Archaic Period 2-18 2.2.3 Woodland Period 2-21 2.2.4 Contact Period 2-26 2.3 Summary and Evaluation of Previous	2.1.4	Discovering Archaeological Data	2-12
2.1.5 Judging the Significance of a Site	2.1.4.1		
2.1.5 Judging the Significance of a Site	2.1.4.2		
2.2 The Prehistoric Cultures of the Area	2.1.5		
2.2.1 Paleo-Indian	2.2		
2.2.2 Archaic Period	2.2.1		
2.2.3 Woodland Period	2.2.2		
2.2.4 Contact Period	2.2.3		
2.3 Summary and Evaluation of Previous Archaeological Research			
Archaeological Research			
2.4 Development of a Predictive Model			2-27
2.4.1 Testing the Model	2.4	Development of a Predictive Model	2-32
2.4.2 Identification of Sensitive Areas for Planning Purposes	2.4.1	Testing the Model	2-40
Planning Purposes			
2.5 Prohistoria Archaellader Bernanda 2.42			
rrenisioric archaeningical Kesnirces /=4/	2.5	Prehistoric Archaeological Resources	2-42
2.5.1 Paleo-Indian			
2.5.1.1 Resources Inventoried			
2.5.2 Archaic			
2.5.2.1 Resources Inventoried		Resources Inventoried	2-11 2-11
2.5.3 Transitional			
2.5.3.1 Resources Inventoried			



Table of	of	Contents (continued)
----------	----	------------	-----------	---

Table of C	ontents (continued)	
	Page	<u>e</u>
2.5.4	Woodland	5
2.5.4.1	Early Woodland	5
2.5.4.1.1	Resources Inventoried	
2.5.4.2	Middle Woodland	
2.5.4.2.1	Resources Inventoried	5
2.5.4.3	Late Woodland	5
2.5.4.3.1	Resources Inventoried 2-4	7
2.5.5	Multicomponent Resources Inventoried 2-47	
2.6	Historical Archaeological Resources 2-48	
2.6.1	Resources Inventoried	
2.6.2	Status, Recognition, Protection	
	and Conclusions	9
2.7	Summary, Recommendations and Conclusions 2-49	
2.7.1	Prehistoric Archaeological Resources 2-49	
2.7.2	Historic Archaeological Resources 2-50	
3.0	PART 2: HISTORIC RESOURCES	
3.1	Historic Background	
3.1.1	Antecedents to Settlement, Prior to 1800 3-1	
3.1.2	Settlement Patterns, 1800-1850	
3.1.2.1	Political Developments, 1800-1850 3-4	
3.1.2.2	Transportation Trends, 1800-1850	
3.1.2.3	Economic Development, 1800-1850 3-9	
3.1.2.4	Population Trends, 1800-1850	L
3.1.3	Settlement Patterns, 1850-1900	3
3.1.3.1	Political Development, 1850-1900 3-13	3
3.1.3.2	Transportation Trends, 1850-1900 3-13	3
3.1.3.3	Economic Development, 1850-1900	
3.1.3.4	Population Trends, 1850-1900	
3.1.4	Settlement Patterns, 1900-1950	
3.1.4.1	Political Developments, 1900-1950 3-18	3
3.1.4.2	Transportation Trends, 1900-1950	3
3.1.4.3	Economic Developments, 1900-1950	
3.1.4.4	Population Trends, 1900-1950	l
3.1.5	Post 1950 Development	
3.2	Summary and Evaluation of Previous	
	Historical Surveys	5
3.3	Methodology: Conducting the Historic Survey in	
	the Eastern Portion of the Coastal Zone 3-32	2
3.3.1	Resources Selected	



Table of	Contents (continued)	
		Page
3.4	Results: Historic Resources Inventoried	3-41
3.4.1	Potential Historic Districts	3-41
3.4.2	Evaluation of Historical Context	3-42
3.4.3	Mercantilism/Commerce	3-44
3.4.3.1	Resources Inventoried	3-44
3.4.3.2	Status, Recognition, Protection, Districts	
	and Conclusions	3-45
3.4.4	Agriculture	3-52
3.4.4.1	Resources Inventoried	3-52
3.4.4.2	Status, Recognition, Protection and Conclusions	3-53
3.4.5	Private Institutions	3-55
3.4.5.1	Resources Inventoried	3-55
3.4.5.2	Status, Recognition, Protection and Conclusions	3-57
3.4.6	Public Institutions	3-61
3.4.6.1	Resources Inventoried	3-61
3.4.6.2	Status, Recognition, Protection and Conclusions	3-64
3.4.7	Public Accommodations	3-67
3.4.7.1	Resources Inventoried	3-67
3.4.7.2	Status, Recognition, Protection and Conclusions	3-70
3.4.8	Transportation	3-73
3.4.8.1	Resources Inventoried	3-73
3.4.8.2	Status, Recognition, Protection and Conclusions	3-75
3.4.9		3-79
3.4.9.1	Industry	
	Resources Inventoried	3-79
3.4.9.2	Status, Recognition, Protection and Conclusions	3-81
3.4.10	Residences	3-83
	Resources Inventoried	3~83
3.4.10.2	, , , , , ,	
	and Conclusions	3-88
3.4.11	Miscellaneous	3-98
3.5	Overall Conclusions	3–100
4.0	OVERALL CONCLUSIONS, RECOMMENDATIONS AND	
	SUGGESTED USE OF REPORT BY PLANNERS	4-1
4.1	Archaeological Sites	4-1
4.2	Historic Sites	4-6
4.3	Conclusions	4-9
5.0	WORKS CITED	5-1



Table of Contents (continued)

Page

Appendices

Appendix	A -	Inventory	of Cultural Resources Identified
Appendix	В -	Annotated	Bibliography
Annendix	C -	Simmaries	of Partinent Preservation Legislation

Figures and Tables

Figure	1-1	Map Showing Lake Erie Coastal Zone
		Study Area Boundaries
Figure	3-1a	Photograph - Customs House 3-44
Figure	3-1b	Photograph - Bonnell Block 3-44
Figure	3-2	Photograph - Victorian
		Eclectic-Commercial Row 3-4
Figure	3–3a	Photograph - F. Schneider Store 3-53
Figure	3-3b	Photograph - North Park Row
Figure	3-4	Photograph - Octagon Barn 3-5
Figure	3-5	Photograph - United Park Methodist Church . 3-5
Figure	3-6	Photograph - St. Mary's College 3-5
Figure	3-7	Photograph - St. Joseph's Apartments 3-60
Figure	3-8	Photograph - Erie County Library,
		Main Branch 3-6
Figure	3-9	Photograph - Firefighter's Museum 3-6
Figure	3-10a	Photograph - Public School No. 3 3-6
Figure	3-10b	Photograph - Schoolhouse 3-6
Figure	3-11	Photograph - Perry Memorial House 3-70
Figure	3-12	Photograph - Inn in North East 3-7
Figure	3-13	Photograph - Palace Hotel, North East 3-7
Figure	3-14	Photograph - Haynes House 3-7
Figure		Photograph - Land Lighthouse 3-7
Figure	3-16a	Photograph - Avonia Depot 3-7
Figure	3-16Ъ	Photograph - Lakeshore Railway Depot 3-7
Figure	3-16c	Photograph - Nickle Plate Station 3-7
Figure	3-17	Photograph - Erie Waterworks 3-8
Figure	3-18	Photograph - General Electric Complex 3-8
Figure		Photograph - Modern Tool Building 3-8
Figure	3-20a	Photograph - John Hill House 3-8
Figure	3-20ъ	Photograph - Reed Mansion 3-8
Figure	3-20c	Photograph - Cashier's House 3-8
Figure		Photograph - Hugh Cunningham House 3-8
Figure	3-22	Photograph - West 6th Street 3-9
Figure	3-23	Photograph - Flagship Niagara 3-9



Table of Contents (continued)

			Page
Figures and	Tables	continued)	
Figure A	A− 1	Map Showing Areas of High, Moderate and Low Archaeology Site Sensitivity	
Figure .	A-2	Map Showing Coastal Zone Study Area Site Location Map 1, Springfield Township	
Figure	A-3	Map Showing Coastal Zone Study Area Site Location Map 2, Girard, Fairview and Milcreek Townships	
Figure A	A-4	Map Showing Coastal Zone Study Area Site Location Map 3, Millcreek and Harborcreek Townships, Lawrence Park, City of Erie and Presque Isle Peninsula	
Figure A	A-5	Map Showing Coastal Zone Study Area Site Location Map 4, City of Erie Insert	
Figure	A-6	Map Showing Coastal Zone Study Area Site Location Map 5, Harborcreek and North East Townships	
Figure /	A-7	Map Showing Coastal Zone Study Area Site Location Map 6, North East Borough	
Table 1	-1	Lake Erie Coastal Zone Acreage/ Population Summary	1-9
Table 2	-1	Chronological Chart of Pennsylvania	
Table 2	- 2	Prehistory, Part 1	2–2
Table 2		Prehistory, Part 2	2-4
Table 2	-3	Relative Chronologies	2-6
Table 2	- 4	Coastal Zone Management Summary of	
		Environmental Ranks	2-37
Table 3		Definition of Resource Categories	3-33
Table 3		Examples of Themes Covered	3-37
Table 3		Mercantilism/Commerce, Thematic Breakdown	3-46
Table 3		Mercantilism/Commerce, Recommendations	3-49
Table 3		Agriculture, Thematic Breakdown	3-54 3-56
Table 3	-0	Agriculture, Recommendations	J-50



Table of Contents (continued)

		Page
Table 3-7 Table 3-8 Table 3-9 Table 3-10 Table 3-11 Table 3-12 Table 3-13 Table 3-14 Table 3-15	Public Institutions, Thematic Breakdown Public Institutions, Recommendations Public Accommodations, Thematic Breakdown . Public Accommodations, Recommendations Transportation, Thematic Breakdown Transportation, Recommendations	3-62 3-65 3-68 3-71 3-74 3-76 3-78
Table 3-16 Table 3-17 Table 3-18	Industry, Thematic Breakdown	3-84 3-85
Table 3-19 Table 3-20	Miscellaneous, Thematic Breakdown Miscellaneous, Recommendations	3-99
Table A-1	Definition of Codes Used on Survey Forms	
Tables A-2	through A-10: Specific Sites Which May Merit Special Attention and Consider	
	Table A-2 Mercantilism/Commerce Table A-3 Agriculture Table A-4 Private Institutions Table A-5 Public Institutions Table A-6 Public Accommodations Table A-7 Transportation Table A-8 Industry Table A-9 Residences Table A-10 Miscellaneous	



1.0 INTRODUCTION

1.1 Project Background

The preparation of this report was financed through the Pennsylvania Coastal Zone Management Program under provisions of the Federal Coastal Zone Management Act of 1972, as amended, administered by the Division of Coastal Zone Management, Bureau of Water Resources Management, Pennsylvania Department of Environmental Resources. Matching funds were also provided by the Pennsylvania Historical and Museum Commission. This report follows the conditions outlined in the contractual agreement, No. 819707, and the documents for Historic Resources Protection Plan for the Lake Erie Coastal Zone.

1.2 Objectives

Planning specialists at all levels of government require reliable and detailed data in order to make the most economical and efficient decisions concerning the growth and development of the geographical and social units for which they are responsible. Such data concern a wide variety of social and physical environmental variables.

Among these variables are aspects of the social environment representing past prehistoric and historic human accomptishments within a particular target area. These include cultural resources in the form of prehistoric archaeological sites, historic archaeological sites and historic sites. This document was created with the express



purpose of providing planners focusing on the Lake Erie Coastal Zone within Erie County Pennsylvania with such cultural resource data.

It is intended to be used as a multipurpose tool. First, it is a tool for identifying the quality, quantity, condition, and integrity (among other characteristics) of specific known cultural resources located within this coastal zone area. Second, it evaluates the overall quality of past research and recommends possible future action related to cultural resources located within the Lake Erie Coastal Zone. Finally, this report details a predictive model which can be used by planners to identify specific locations which potentially may contain cultural resources.

The knowledge of where sites are located, the quality of the data available, the extent of research, and the recognition of areas potentially bearing cultural resources should assist planners at all levels of government in making decisions which complement cultural resource preservation needs with the economic, etc. development of an area. In addition, it can be used to evaluate the impact upon resource preservation of plans already confirmed for implementation.

In order to develop this report and enhance its utility as a planning tool, seven specific objectives were achieved. They were:

- To consolidate information concerning all known historic and archaeological resources within the Lake Erie Coastal Zone.
- To discover and identify above-ground historic resources which are potentially eligible for nomination to the National Register of Historic Places



in areas within the survey zone where such surveys and evaluations have not occurred previously.

- 3. To identify previously known historic resources which are potentially eligible for nomination to the National Register of Historic Places within the study area.
- 4. To evaluate the known historical sites in the context of local and national architectural, political, economic, religious, etc. events and trends.
- 5. To generate, test, and refine a diachronic predictive model from the analysis of interrelationships among classes of archaeological sites and certain environmental variables.
- 6. To identify areas of archaeological site sensitivity within the study area (based upon the refined predictive model).
- 7. To use available archaeological site data to generate descriptive and/or explanatory models pertaining to the culture-history of the area, settlement pattern, resource exploitation, contacts with neighboring cultures, etc. and to suggest areas of future research.

1.3 Defining Cultural Resources

For the purposes of this report and for the sake of consistency of interpretation on the part of reviewers of this report, cultural resources were defined in the same way as defined in The Resource
Cultural Resources of the Pennsylvania/Delaware River Coastal Zone
<a href="Cee Jay Frederick Associates with John Milner Associates 1981:1):

"Prehistoric resources refer to sites which contain evidence of indigenous Indian settlement and related activity. Generally these sites will date before the



first European settlements in the . . . seventeenth century. Historic archaeological resources are sites which contain remains from activities subsequent to European incursion and settlement. Historic resources refer to above-ground structures which are presently observable in the Coastal Zone. These historic resources also may serve to identify potential historic archaeological resources since the sites may likely contain below-ground evidence of earlier historic settlement. These three resource groups are collectively referred to as "cultural resources." All resources may exist as individual sites, structures, or districts, encompassing a few or hundreds of acres."

Perhaps the distinction between historic archaeological sites and historic sites is not entirely clear. The difference lies primarily in the quality of the remains associated with each class of sites. Historic archaeological sites contain primarily subsurface evidence of historic (including historic indian) activity. This evidence includes the remains of buildings, outbuildings, walkways, roads, fences, garbage disposal areas, etc. Historic sites, although they may contain archaeological remains, are primarily above-ground buildings and remains which maintain some degree of structural integrity. Perhaps a simple rule of thumb for distinguishing the two classes of remains would be as follows. If the structure and organization of a historically or architecturally significant building and associated constructions can be identified by examining above-ground remains, then the site is a historic site. If the structure and organization of a building and associated constructions cannot be identified by examining above-ground remains but require



the use of archaeological methods, then the site is an archaeological historic site.

1.4 Organization

Because this report is to be used as a planning tool, it was necessary to organize the information presented in it in a form which was readable. The Introduction details the objectives of this report, its organization, a description of study area and its boundaries, and basic approaches to consolidation and identification of cultural resources within the study area.

The major body of the report is divided into two parts. Part

One (Chapter 2) focuses on archaeological resources (prehistoric and

historic). This chapter includes a summary of the prehistory of

the area (including contact with Europeans), a summary and evaluation

of previous archaeological research in the area, a brief statement

of methodology including the development of the predictive model and

a discussion of archaeological resources inventoried, and recommendations.

Part Two (Chapter 3) focuses on historic resources. This chapter in
cludes a summary of the history of the area, a discussion of previous

historic researches in the study area, the methodology of completing

the historic site inventory within the coastal zone study area, a

thematic breakdown of inventoried sites, and recommendations.

The concluding chapter (Chapter 4) outlines overall conclusions, recommendations and suggested use of the report by planners. Chapter 5 lists the literature cited.



Appendix A inventories the cultural resources identified by this study. Figure A-1 is the predictive sensitivity map. Figures A-2 through A-7 are maps which locate each inventoried resource.

Appendix B is a thematically organized annotated bibliography.

Appendix C includes summaries and copies of relevant preservation legislation and information.

To be of most efficient use, the report emphasizes results as much as possible. Therefore, methodological detail is absent from this report. It is included in a voluminous technical report which is available to the interested reader at the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation, located at the William Penn Museum in Harrisburg, Pennsylvania.

First, it organizes known data on cultural resources. Second, it generates predictive statements on the probability of occurrence of archaeological resources. It presents this information on maps and tables in an accessible format for consultation during the planning process. Finally, it classifies resources within the Lake Erie Coastal Zone based on recognized historical themes and culture periods. Throughout, the narrative and the graphics minimize technical jargon and emphasize clear understandable English because a planning document is useless if only a small group of specialists

To conclude, the overall emphasis of this document is threefold:

This document will be of use to the Division of Coastal Zone

Management during its various review and permitting activities. The

can understand it.



Pennsylvania Historical and Museum Commission will potentially use the document during environmental impact considerations and preservation planning within the coastal zone in addition to adding to the inventory known as the Pennsylvania Historic Resources Survey.

1.5 Study Area Boundaries and Description

The boundary of the study area known as the Lake Erie Coastal Zone Erie County, Pennsylvania is detailed as follows (The Pennsylvania Coastal Zone Management Technical Record, Bureau of Resource Programming, Office of Resource Management, December 1978):

"Beginning in western Erie County, the coastal boundary follows two principle physical features. The first such feature is the ConRail right-of-way which extends from the Ohio State line to Lake City Borough. Most of the coastal boundary from Lake City to the City of Erie follows West Lake Road, otherwise known as Route 5 (west of Asbury Road) and Alternate Route 5 (east of Asbury Road) with the exception of an area located in portions of Cirard and Fairview Townships. Immediately east of Lake City Borough the boundary extends southward to Middle Road between the Lake City Borough line and Avonia Road in Fairview Township in order to include a GAPC noted for its prime agricultural capabilities.

"Beginning in Millcreek Township and extending into the City of Erie the coastal zone narrows to a strip sometimes reaching a width of only 400 feet. Here the coastal boundary predominantly follows South Shore Drive and West Second Street, thus excluding much residential development of limited coastal significance. One exception is an area near Cascade Creek where the boundary is extended to West Sixth Street. This area is as yet a predominantly undeveloped portion of the City. In east Erie the coastal boundary follows East Second Street, and at Ash Street jogs south to follow East Third Street for several blocks. At Hess Avenue the boundary turns south to East Sixth Street (East Lake Road). From this point the coastal boundary tollows East Lake Road for seven miles through Lawrence Park Township and then midway into Harborcreek Township.



"The coastal boundary turns south and follows Bartlett and Depot Roads to a point which is over three miles inland. At McGill Road the boundary turns eastward and follows a line roughly parallel to the Lake Erie shoreline until it reaches the New York State line. This east-west boundary extends a distance of over ten miles and predominantly follows both Sidehill Road and the 1050 foot ridge line. Concentrated within the bounds of Erie County from Bartlett Road to the New York State line is some of the most productive farmland in Erie County on which are grown many of the County's most vital cash crops."

Figure 1-1 shows the approximate location of this boundary.

Previous Coastal Zone Management studies (1978:6-18,6-19) have divided this coastal zone into three study units for which certain demographics will be detailed in Table 1-1 and in the following (1978:6-18,6-19):

"A total of ten municipalities and Presque Isle State Park (officially an unorganized territory) encompass the final Lake Erie coastal zone. Together this area totals approximately 52,800 acres or about 83 square miles. The population of the final CZM area in 1970 was 22,898. By 1975, it had grown to 23,569 people, an increase of 2.9%. The projected Lake Erie coastal zone population by the year 2000 is 28,337 people, an increase of 23.8% over the 1970 figure.

"The western Lake Erie coastal zone area includes portions of Springfield, Girard and Fairview Townships and Lake City Borough. The 1975 population of this 15,964 acre area was 3,729 people, a population of .2 persons per acre. This low overall density is an indication of the rural character of this part of the coastal zone.

"The central Lake Erie coastal zone area includes portions of the City of Erie, Millcreek and Lawrence Park Townships and all of the Presque Isle State Park. With 5,914 acres and a 1975 population of 9,566 people, there was a density of 1.6 people per acre. This density is actually quite low due to the fact that Presque Isle, which is basically uninhabited, is included in this density figure. Exclusing Presque Isle, the population density of the central area registers 3.6 persons per acre.



Table 1-1

SUMMARY OF CERTAIN COASTAL ZONE CHARACTERISTICS
BY TRIPARTITE STUDY AREA*

	Townships and			Populati	on
Study Area	Communities	Acreages	1970	1975	2000
West	Springfield Township Girard Township Lake City Borough Fairview Township	7,997 4,126 508 <u>3,333</u> 15,964	404 552 386 2,005 3,347	422 588 418 2,301 3,729	584 949 607 3,493 5,633
Central	Millcreek Township Presque Isle Erie City Lawrence Park Twp.	1,457 3,242 843 372 5,914	3,967 34 3,883 1,512 9,396	4,180 34 3,821 1,531 9,566	5,135 34 3,949 1,584 10,702
East	Harborcreek Twp. North East Twp. North East Borough	6,276 23,463 1,227 30,966	2,888 3,421 3,846 10,155	3,022 3,485 3,767 10,274	3,805 4,176 4,021 12,002

^{*} Modified from The Pennsylvania Coastal Zone Management Technical Record, December 1978



"The eastern Lake Erie coastal zone area includes portions of Harborcreek and North East Townships and all of North East Borough. This region is 30,966 acres in size with a total 1975 population of 10,274 persons. Accordingly, there is a .3 person per acre density, a figure which closely compares with the density of the western Lake Erie coastal zone."

The Lake Eric Coastal Zone study area lies within the Central Lowland physiographic province called the lake plain. This plain extends southward from the lake for approximately two miles in the eastern portion of the coastal zone and as much as five miles in the west. Its elevation is 80 feet or more above lake level. It terminates along the lake as a cliff. Glacial till is exposed over most of the cliff as is some bedrock.

The plain itself is flat with the exception of abrupt former beach ridges. In the southern portion of the plain the surface is irregular due to uneroded glacial deposits.

Soil in the lake plain varies from sandy near the lake to gravelly and sandy on the beach ridges to finer textured soils.

Drainage ranges from well but slow along the lake to rapid in the south to poor in areas of finer textured soils.

The climate of the lake plain is influenced predominantly by Lake Erie and can be substantially different from the adjoining uplands to the south. Warm waters in the fall and cool waters in the spring affect both temperatures and precipitation amounts, especially snowfall, there being less within the plain than in the uplands to the south.



Streams cut steep-walled valleys across the plain, cutting into glacial and/or lake deposits. Bedrock is exposed along stream beds. Although no major rivers flow into the Lake within the coastal zone study area, there are close to 50 streams.

A major feature of the coastal zone is the seven-mile long Presque Isle Peninsula. This recurved sand spit forms Presque Isle Bay enclosing the harbor of the City of Erie. The channel entrance to the harbor is regularly dredged and maintained by the U.S. Army Corps of Engineers. The Peninsula itself is maintained within the State Park system and is the prime recreational attraction in the coastal zone study area. Beaches, dunes, and lagoons characterize the surface of the peninsula.

The coastal zone is both rural and urban in character. The major urban development is in the central portion of the zone which includes the City of Erie. Rural portions of the zone are used for agriculture and undeveloped forests. Grapes and orchard crops are especially apparent and encouraged by the moderate temperature variations.

Throughout the coastal zone, fish and wildlife are abundant.

Over forty fish species and over forty wildlife species are found within the coastal zone. Two hundred thirty-seven species of birds have been sighted on or in the vicinity of the peninsula. Of these, seventeen species are permanent residents there.



A more detailed description of the coastal zone may be found in Tomikel and Schepps (1967), The Geography and Geology of Erie County Pennsylvania and Draft Environmental Impact Statement and the Proposed Commonwealth of Pennsylvania Coastal Zone Management Program (1980). The information presented in the preceding description was gathered from these sources.

1.6 Summary of General Methodology: Consolidating and Identifying Cultural Resources

The consolidation of data was considered to be an important first step to the development of a useful and efficient tool for management of cultural resources within the Lake Erie Coastal Zone within Erie County, Pennsylvania. In their present form, existing surveys made an unmanageable planning tool for a number of reasons. First, although much site information was centrally located, all such information was not. Second, most surveys used somewhat different criteria or standards for including sites in their inventories. For example, some historic site surveys focused only on sites of architectural merit or uniqueness, others upon a particular range of time. Third, there existed inconsistency in observation and recording among the surveys since many employed their own particular sets of instructions, methods and goals. Fourth, together the surveys represented an incomplete and often biased sample of archaeological and historic resources. Finally, few of the surveys undertaken in the area were designed specifically to be used as a serious planning



tool. Evaluations of these surveys and reports enabled the identification of cultural or geographical gaps in available data. These gaps were filled wherever appropriate during the research effort.

The cultural resources selection process for this report involved two basic tasks:

- 1. Consolidation of information concerning all known historic and archaeological resources within the Lake Erie Coastal Zone.
- Discovery and identification of above-ground historic resources in areas within the survey zone where such surveys and evaluations have not previously occurred.

The information consolidation effort involved accessing the following sources:

- County, State and Federal public records (including the National Register of Historic Places; the site inventories of the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation, and Division of Archaeology; County-sponsored studies of cultural resources, city-sponsored studies of cultural resources, etc.).
- 2. Records, documents, collections and inventories of public and private institutions, organizations, and individuals (including universities and museums that conducted investigations in the area); County, State and special interest historical and archaeological societies.
- 3. Published documents (including books about local history and prehistory, historic maps, atlases, ethnographies, historical journals, county histories, archeological journals, local newspapers, etc.).
- 4. Consultation with individuals who have expertise in local prehistory, history, architecture, and cultural resource management of the project area (including



archaeological collectors, construction firms, salvage operations, dredging firms, Corps of Engineers, etc.).

The consolidation effort included mapping the location of all inventoried archaeological and historic resources on maps which meet at least minimal standards of the Bureau for Historic Preservation. Historic sites information was recorded on the Pennsylvania Historic Resource Survey Form if such a record did not exist. Archaeological site information was recorded on the Pennsylvania Archaeological Survey Form if such a record did not exist. Chapters 2 and 3 detail the results of this research effort.



2.0 PART 1: ARCHAEOLOGICAL RESOURCES

This section of the report focuses upon archaeological resources found within the Lake Erie Coastal Zone. It includes a summary of the prehistory of the area, a discussion of previous archaeological research in the area, a brief statement of methodology including the development of the predictive model, a discussion of archaeological resources inventoried, and recommendations. To facilitate understanding of the prehistoric and historic background of the coastal zone study area, Tables 2-1 through 2-3 present the cultural chronology of the study area in tabular form.

2.1 Background: Defining Archaeological Data and Methods

Despite increased professional archaeological activity in the United States during the past 15 years, there remains a popular misunderstanding of what archaeologists do. The most popular conception of archaeologists is that they are treasure hunters. In order to enhance decision making which effects archaeological resources, it is necessary that a planner have some minimal understanding of what archaeologists do and what they work with. This discussion is not meant to instruct in detail about the variety of archaeological interests and methods. It is meant to provide a background against which the planner can place the succeeding sections of this chapter.

The remaining sections of section 2.1 are excerpted from a series of lectures (n.d.) compiled by Dr. Renata B. Wolynec, Professor of Anthropology at Edinboro State College from her personal researches and basic textbooks in archaeology (Hole and Heizer 1977; Fagan 1981).

Table 2-1

CHRONOLOGICAL CHART OF PENNSYLVANIA PREHISTORY, PART 1 (KENT, SMITH, AND MCCANN 1971:4)

			i
Culture Periods	Dates	Settlement and Subsistence Patterns	Characteristic Artifacts
Late Woodland	1550 A.D. 1000 A.D.	Seasonaily sedentary tribes; villages and hamlets (some stockaded villages); horticulture, hunting and gathering.	Cord-marked and/or incised decorated pottery; triangular projectile points; bow and arrow; elbow and vasiform pipes; celts; various bone tools and ornaments.
Middle Woodland	1000 A.D. 500 B.C.	Incipient tribal village life in western Pa., supported by horticulture, hunting and gathering; bands in eastern Pa. living in scattered hamlets, practicing hunting and gathering.	Diversification of cord- and net-impressed pottery; side-, corner-, and basal-notched spearpoints; platform pipes; elbow pipes; celts; burial mound complexes.
Early Woodland	300 B.C. 1000 B.C.	Bands of family units living in scattered households; persistence of hunting and gathering, with a possible shift in some areas to semi-sedentary settlement due to a more stable economic base.	Interior-exterior cord-macked pottery; plain flat-bottomed vessels; side-notched and expanded stemmed points: tubular stone pipes; adzes; bar weights; birdstones; gorgets.

Table 2-1 (continued)

Culture Periods	Dates	Settlement and Subsistence Patterns	Characteristic Artifacts
Transitional	800 B.C. 1800 B.C.	Far ranging bands of hunters and gatherers, occupying temporary hamlets; heavy dependence on riverine resources.	Fishtail and broad spearpoints; soapstone cooking vessels.
Archaic	1000 B.C. 7000 B.C.	Bands of hunters and gatherers, follow- ing patterns of restricted seasonal wandering.	Various spearpoint and knife forms; grooved axes; adzes; atlati weights; pestles; mullers; choppers.
Paleo- 1 Indian	10,000 B.C.	Bands of nomadic hunters.	Fluted points; scrapers; knives; gravers.

Table 2-2

CHRONOLOGICAL CHART OF PENNSYLVANIA PREHISTORY, PART 2 (KENT, SMITH, AND MCCANN 1971:4)

Culture Periods		Mest	Major Components and Distributions Central	ributions	East
Late Woodland	North	McFate Monongahela Owasco	Proto-Susquchannock Chance-Wyoming Shenks Ferry Kelso Clemson's Island Owasco	channock ing / sland	Chance-Munsee Kelso Owasco
	South	Monongahela	Shenks Ferry Clemson's Island	y sland	Overpeck
	North	Mahoning Diluted Hopewell	Kipp Island		Bushkill Point Peninsula
Moodland		^	Various local developments throughout	s throughout	
	South	Watson Diluted Hopewell	Radford Accokeek Creek	eek	Abbott
	North	Middlesex or Local Adena	Adena Neadowood Local Adena		Meadowood Middlesex
Early Woodland		Λ	Various local developments throughout	s throughout	
	South	Local Adena Half-Moon	Marcey Creek Half-Moon	ید	Marccy Creek

Table 2-2 (continued)

Cultural Periods		Major Compone West	Major Components and Distributions Central	East
Transitional	North	Ashatabula Susquehanna Influence	Orient-like Susquehanna	Orient Perklomen Lehigh
	South	Ashtabula Susquehanna Influence	Orient-like Susquehanna Perkiomen	Orient Perkiomen Lehigh
	North	Laurentian Lamoka Proto-Laurentian	Laurentian Lamoku Piedmont	Laurentian Piedmont
Archaic		Various local	Various local developments throughout	
	South	Proto-Laurentian Panhandle	Laurentian Piedmont	Laurentian Piedmont
Paleo- Indian		Clovis related . Enterline indu	Clovis related cultures throughout; Enterline industry in central Pa.	

Table 2-3

RELATIVE CHRONOLOGIES

Willey/Phillips (1958) Stages	Krieger (1964) Stages	Willey (1966) Traditions	Griffin (1964) Periods	Witthoft (1965) Periods	Ritchie (1969) Stages	Kent/Smith/McCann (1971) Periods
*	<-	←	t Late Woodland	European Conquest Late Woodland c. 500-1550 A.D.	‹	Late Woodland c. 1000-1550 A.D.
Formative	Formative †	Woodland ↑	Middle Woodland A Early Woodland	Middle Woodland c. 500 B.C500 A.D. Early Woodland c. 1000-500 B.C.	Woodland c. 10CC-1600 B.C.	Middle Woodland c. 500 B.C1000 A.D. Early Woodland c. 1000-300 E.S.
·			"Transitional" † Late Archaic	Transitional c. 1500-1000 B.C. tate Archaie	Transitional c. 1300-1000 B.C.	Transitional c. 1800-800 B.C.
Archaic	Archaic Proto-Archaic † Paleo-Indian	Archaic ↑	f Early Archaic	Early Archaic c. 6000-4000 B.C. Late Paleo-Indian	Archaic 4500-1300 B.C.	Archaic c. 7000-1000 B.C.
Lithic+	Pre-Projectile Point	Big Game Hunting	Fluted Blade Hunters	c. 9000-6000 B.C. Middle Paleo-Indian Early Paleo-Indian	Paleo-Indian Hunter c. 8000 B.C.	Palco-Indian c. 10,000 B.C.



2.1.1 Defining the Past

Archaeology has been defined as the systematic study of the past from the remains of human behavior given certain specified objectives. For the archaeologist, the past has three aspects: prehistory, history and the living past.

Prehistory refers to that part of human existence for which no written documentation exists. This part of the past encompasses close to 99 percent of human time. Archaeological methods are the only ones available, to date, through which this part of the past can be discovered. The historic past refers to that part of human time for which written documents are available for study. Because archival records rarely detail aspects of the life of all social strata within a particular culture, archaeological methods are necessary to fill in this detail. For more recent historic times, photographs and informants can be important sources of data. However, photographs can be fuzzy and human memory is selective. Therefore, archaeological methods may again become necessary to resolve a particular aspect of historical behavior. Archaeology can also be used to verify documented historical activities.

Most recently, archaeologists have begun to examine the "living" past. These archaeologists study the remains of human behavior as they are being produced. Such studies allow the archaeologist to develop models of debris dispersal, etc. which facilitate the interpretation of remains discovered and observed solely as archaeological data.



2.1.2 Classes of Archaeological Data

There are three classes of remains which concern archaeologists:

- 1. archaeological sites
- 2. things found in archaeological sites
- 3. archaeological context

An archaeological site is any place large or small where the remains of human behavior are found. It can be as small as the location where no more than an arrowhead lies when accidently dropped and lost in the woods. It can be as large as a city. Archaeological sites are classified in a number of ways. They can be classified by location (e.g. a flood plain site), by archaeological culture (e.g. Archaic), by function (e.g. campsite), by length of occupation (e.g. seasonal), and by internal organization (e.g. multi-component (more than one occupation); stratified (containing more than one cultural or natural deposit or layer)). Because these are not mutually exclusive categories, a particular site may be identified as a multicomponent stratified flood plain seasonal Archaic campsite.

The second category of remains studied by archaeologists includes things found at archaeological sites. There are three classes of such remains:

- 1. portable artifacts
- 2. non-portable artifacts
- 3. by-product materials.



Portable artifacts are those products of human behavior which were created for a specific purpose. They can be transported without destroying them. Examples of portable artifacts are projectile points, ceramic vessels, knives, jewelry, etc.

Non-portable artifacts are commonly referred to as features.

Features are created for a particular purpose and cannot be moved without destroying them. Examples of features are house foundations, storage pits, threshing floors, wall trenches, pit ovens, burials, and earth mounds. For the most part, they cannot be moved or excavated without destroying their structure and organization.

By-product materials are the third class of remains found at archaeological sites. These are remains which are produced as a consequence of a particular kind of behavior and are popularly referred to as garbage. Examples of by-product materials include the bones which remain after a duck has been eaten; the flakes of stone which remain after an arrowhead has been manufactured; the charcoal, ash, and burnt soil which remain after a fire has been burned; the mussel shells which remain after the flesh has been removed; among many other examples. By-product materials are a very important source of data for archaeologists concerned with reconstructing diet, tool making, and the distribution of human activities within a site or geographical region (among other problem orientations).

Perhaps the source of archaeological data least appreciated and understood by the layman is archaeological context. Archaeological



context is generally defined as the environment in which all other sources of data and even whole cultures are found. This includes the environment of time (e.g. answering the question, "When did this occur?"); the environment of space (e.g. answering the question, "Where did this occur?"); and the environment of culture (e.g. answering the question, "What did this occur with?"). It is context which gives "meaning" to the other sources of data. For example, a triangular pointed small pressure—flaked stone object when found embedded in the bone of an animal might be defined as a hunting tool. An identical object found in a ceramic vessel inside a burial pit containing human skeleton, might be defined as a burial offering. Without knowledge of these associations, the function of each stone object might not be interpreted.

2.1.3 Classes of Objectives

Three general classes of objectives guide archaeological researches:

- 1. The reconstruction of culture-history.
- 2. The reconstruction of lifeways.
- To describe and explain cultural processes, especially those concerned with cultural change.

The reconstruction of culture history involves defining the diagnostic characteristics of an archaeological culture, its geographical location, and time of its occurrence. Section 2.2, the Prehistoric Cultures, is primarily a general presentation of the culture-history of northwest Pennsylvania, in particular, the coastal zone study area.

The reconstruction of lifeways includes the reconstruction of the day-to-day, week-to-week, month-to-month, year-to-year behaviors of a



particular culture under study. Among researches associated with this objective are the reconstruction of diet, tool making, food preparation, food procurement, clothing manufacture, house construction, settlement organization, trade networks, social organization, and religious systems, among many others.

The description and explanation of cultural processes is the most recently developed area of archaeological inquiry. Researches focus upon discovering patterned inter-relationships and interactions among cultural variables, among cultural variables and physical environmental variables, and among cultural variables and social environmental variables. Such studies involve complex environmental reconstructions and attempts at correlating certain environmental characteristics with specific cultural characteristics. The development of the predictive model for this report involved assumption that archaeological sites were located in places which provided certain desirable environmental characteristics.

By discussing this pattern of interrelationship between site location and certain types of environmental characteristics such as distance to water, slope of the land, and soil quality, amon; others, this report was able to produce a map which identified areas of probable high, moderate, or low site occurrence. The reader should be aware that the fact that patterning was discovered does not mean that it can be explained in other than the most general terms. Explanation will depend upon a great deal more research in the coastal zone study area.

2 - 11



2.1.4 Discovering Archaeological Data

Although there are many techniques which archaeologists use to solve specific research problems, two general classes of methods stand out in importance:

- 1. survey
- 2. excavation

2.1.4.1 Survey

Specific survey techniques vary depending upon the research problem guiding the survey effort, accessibility, ground cover, the skill of personnel, amount of time and money available, and availability of supplementary sources of data such as those gathered from informant interviews, maps, aerial photographs, and previous researches. Archaeological survey efforts involve a combination of archival research, informant interviews, and walking the study area. Indeed, most archaeological sites are discovered by foot survey, that is, the actual examination of the terrain on foot. The surveyor looks at the surface for the remains of human behavior (e.g. remains of a fire, dark stains along the surface, pottery remains, food remains, stone tools, flakes of stone, among a great many others). This is supplemented by periodic digging of small test squares to discover archaeological remains which have no surface manifestations. How much land surface is walked, the distance between and number of test units, etc., again vary with the particular problem orientation. This report documents throughout all chapters how and why this survey effort was carried



out and the sources of data which were accessed. It is important to note that no survey effort can locate everything.

2.1.4.2 Excavation

A major class of techniques used to discover the structure and organization of an archaeological site involves excavation, the actual movement of soil and archaeological remains. Excavation is usually approached as follows: First the site area is gridded and each square in the grid is given a unique identified label. Individual squares are excavated in vertical arbitrary levels which may be altered as individiaul cultural or natural deposits in the soil are identified. Ten centimeter or 3 inch vertical levels are in common use. Artifacts are gathered and stored according to the square and square level they were found in. Features are identified, drawn, and photographed prior to and during excavation. Detailed notes are kept for each level. Artifacts and features may or may not be located exactly in the three dimensional space of the square depending upon the problem orientation guiding excavations.

Archaeological excavations can take a number of forms. Individual test excavations are dug to determine the depth of deposits, the boundaries of the site, the variety of activities represented, the number and variety of cultural occupations, among other reasons. Large scale excavations, called block excavations, consist of excavating a large number of adjoining squares. Block excavations allow the archaeologist to examine in detail the structure and organization of a



particular settlement deposit. In particular, the archaeologist can identify the variety of activities which took place at a certain point in time and the spatial interrelationships among these activities. Again, the specific excavation techniques used, the sampling strategies used, and the number of excavation units attempted depend upon the problem orientation guiding the excavations, the length of the field season, the quality of the crew, the amount of money available, among other variables. The reader should be aware that no matter how systematic the excavations, the process of excavation is a destructive one. Indeed, after excavations are completed, the only "reality" a site maintains exists in the remains collected and in the records recording the context in which they occurred. These are analyzed by a number of natural science and cultural specialists using a multitude of techniques which cannot be adequately discussed here.

2.1.5 Judging the Significance of a Site

A problem of major concern to a planner is to judge the significance of a site. This is a difficult problem. There are really no specific rules which can be followed. For example, a stratified site need not be more significant than an unstratified site. A stratified site represented by a series of sequential deposits allows the archaeologist to explore the depth of time and variety of cultural occupations evidenced at the site. Certainly such sites are of great value in reconstructing the culture history of a region. However, such sites may not have been occupied continuously nor on the exact same spot at a particular location.



Unstratified single occupation sites can be significant because they yield potentially culturally unmixed deposits. Such sites can allow the archaeologist to examine details of everyday life and activity organization. Such sites may also be examples of sites missing from an incomplete sequence of events present at a stratified site.

The study of both stratified <u>and</u> unstratified sites is necessary if the archaeologist is concerned with identifying the full inventory of activities associated with a particular culture. They are necessary if one is to determine the pattern of settlement distribution over a geographical space by a culture thereby shedding light upon the interrelationship between specific cultural characteristics and environmental variables.

It may also be true that no one type of functional site is more important than another. Kill sites, burial sites, quarry sites, village sites, butchering sites, trading sites, among others, may all represent aspects of a culture's diversity of activities throughout the year. Certainly, village sites are sites which have the potential of yielding a great deal of data about certain types of day-to-day activities. However, one cannot assume that they contains evidence of all varieties of activity.

If no one type of site need be more significant than another, it is also true that no one artifact is necessarily more important than another, no one feature more important than another. Burials may yield



demographic, physiological, pathological, and sociological data. They
do not necessarily yield data on food procurement and processing techniques, variety of diet, tool making techniques, etc. Bones, seeds,
pits, stone tools, pottery and buildings each provide data representing
aspects of the diversity of a culture's activities. Too often, amateur
archaeologists, and in some instances professional archaeologists, have
focused upon exotic, unique, or complete portable artifacts. These
extremely biased collections have often led to extremely incomplete
characterizations of prehistory. Certainly there is more to a culture
than changing projectile point shapes and sizes and changing pottery designs!

If no one class of site and no one class of remains within a site need be more significant than another, then how is the planner to determine the impact of cultural resources upon planning efforts? In this instance, the planner should rely upon experts within the Pennsylvania Historical and Museum Commission and professional archaeologists who have worked within a specific target area. The planner must remember that the significance of a site must be judged from the framework of specific problem orientations and research objectives. Nevertheless, the planner must be aware of the steps which could be taken to hasten and clarify the determination of a particular site's significance. A number of these steps will be outlined in Chapter 4 of this report.



2.2 The Prehistoric Cultures of the Area

2.2.1 Paleo-Indian

The Paleo-Indian period represents the initial occupation of the New World. In the region of northwestern Pennsylvania, the period commences with the melting of Pleistoceme glaciation of the area and the subsequent draining of a series of elevated pro-glacial lakes which occupied the Erie basin until about 14,000 B.C. By 12,000 B.C., the Erie County region represented a cool mixed hardwood-conifer forest with slower rivers flowing to a higher series of lake levels. By 8,000 B.C., a rapid drop in lake levels in less-than-modern elevation seems to have been accompanied by a shift to a nearly modern flora through the Great Lakes/Ohio Valley region. It is to this transitional period, from 12,000-10,000 B.C., that most of the acceptable evidence for the first appearance of man in the Erie County Pennsylvania Lake Erie Coastal Zone area can be assigned. These "Big Game Hunters" developed a cultural tradition which may have adapted to a mixed boreal forest/Pleistocene grassland environment with large Pleistocene megafauna such as mastodon and giant beaver.

Evidence for human occupation during the Paleo-Indian poriod in northwestern Pennsylvania is represented by the finds of fluted and lanceolate projectile points such as Clovis and the slightly later stemmed and shouldered "Plano" points.

Paleo-Indian sites are presumed to be the remains of temporary, repeated occupations by small, mobile hunting and gathering groups.



Distributions of the scattered surface finds tend to favor high bluffs and terraces overlooking the major waterways.

In Erie County, several of the characteristic projectile points of the Paleo-Indian period have been recorded, but these cannot be assigned to any specific site. Recent surveys of the Raccoon and Elk Creek valleys revealed several possible late Paleo-Indian occupations.

Such finds indicate that the early mobile hunting-gathering bands did utilize the Lake Erie beaches and the tributary river valleys and uplands for their subsistence activities, although the only campsites of this period presently documented in Pennsylvania are far to the south of the Lake Erie drainage. Indeed, an absence of sites, despite fairly numerous occurrences of isolated fluted points, is characteristic of the entire coastal and upland region across Ohio, Pennsylvania and New York.

It is thus difficult to reconstruct the exact lifestyles of these early inhabitants. The low density of known early sites is probably a result of the Paleo-Indian's mobile subsistence-settlement patterns and of the alteration and destruction of the land surface over the centuries. Therefore, site locations from these earliest occupations must be considered highly significant.

2.2.2 Archaic Period

During the Early Archaic period, from about 8,000 B.C. to about 5,000 B.C., small mobile groups increased in size and density. Increasing seasonal and geographically restricted hunting-gathering activities



represent the scheduling of subsistence activities to more well-exploited, smaller territories with modern flora and fauna. Lake levels reached their modern elevations and present drainage patterns became established within the general area.

The Early Archaic Tradition represents a continuation of the patterns of the earlier Paleo-Indian period variations due to increasingly sophisticated exploitation of the post-glacial environment. There are clearly resultant changes in the composition and the morphology of the tool assemblages. The Archaic Period may be divided into the Early, Middle and Late Archaic, more as a convenience to the archaeologist. The Early Archaic period is characterized by small bands of semi-nomadic hunters and gathers which increasingly exploit the local flora and fauna via seasonal scheduling. A broad spectrum of artifact types was developed. Ground stone adzes, celts, grooved axes, and chipped stone projectile points frequently stemmed, notched, or barbed in shape, are common. In northwestern Pennsylvania recent archaeological surveys have established the presence, in significant numbers of Early Archaic components. Occupation of the Lake Plain, however, appears to remain minimal during the period.

The Middle Archaic period (5,000-2,000 B.C.) is characterized by more prehistoric sites which are larger, suggesting more sedentary populations who gather seasonally available resources within a diverse, but limited, area. Larger campsites and an increase of small specialized economic sites are found with more and varied tool types, such as



polished igneous stone axes, celts, hammers, and grinding implements. The end of this period is marked in this area by the initial use of cold-hammered copper for similar tools. Numerous Middle Archaic sites have been identified in the project area. These represent large multi-family campsites and small collecting stations.

Although there were alterations in the environment during the period after 4,500 B.C., as the result of climatic variations, there is little evidence for a decrease in population.

The Late Archaic period, from about 2,000 B.C. to 800 B.C., is characterized by geographically specialized economic patterns with local styles of tool types.

In general, the trend throughout the Archaic appears to have been toward more extensive exploitation of diverse but localized resources. This is accompanied by archaeological evidence which suggests seasonal settlement shifting, increased population density, and some regional stability of local aboriginal groups. In the later Archaic, after 3,500 B.C., there is evidence for warmer drier climate. Most styles of stone tools became more elaborate and, in the southeastern United States, pottery made its first appearance. A less nomadic lifestyle appears to have developed, and is represented by the large habitation sites and large shell middens found in some river valleys south of the Lake Erie Coastal Zone project area.

At the same time, the Late Archaic period clearly indicates the beginnings of a long-distance trading system for exotic materials which



are utilized in burials. The Late Archaic period ends with ritualized status burials and in some regions of the eastern United States with the construction of ceremonial burial mounds. Several Late Archaic sites in the area are represented by collections of chipped stone tools and flint/chert chippage recovered in plowed fields. Mostly, these sites are small temporary habitation areas. Archaic upland small sites are known within southern Erie County, and a number of relatively large riverine Late Archaic sites have been reported in less urbanized portions of northwest Pennsylvania.

2.2.3 Woodland Period

The following Early Woodland period, from 800 B.C. to about A.D. 100, is characterized by increasing elaboration of the ceremonial exchange and mortuary rituals of the Late Archaic. In the Ohio Valley, the Adena culture, with small circular earthworks and ritual burial mounds of varying sizes, is the local Early Woodland expression. Several new artifact types mark this period, including the manufacture of crude but elaborately decorated pottery.

Occupation sites from the Early Woodland period are known to occur on bluffs, upper terraces, and hilltops with a general tendency to concentrate around large river systems. Settlements appear to be scattered small campsites. The subsistence economy appears to have been based on intensive hunting, plant food collecting, and fishing, supplemented by limited plant food production. While seasonal economic activities are not well known, the presence of early <u>curcurbita</u> (squash and/or pumpkin)



and the limited ceremonial presence of some Zea Maize suggest limited horticulture, although not economically significant. Adena burial practices are often characterized by accretional burial mounds. Frequently, the initial mound stratum covers a structure which had been burned after one or more burials had been interred in the floor. Small circular earthworks may also be associated with this period, and the ceremonial site may yield various imported and manufactured items such as conch shells, cache blades, slate and copper gadgets and bracelets, and thick coarsely-tempered pottery.

The Middle Woodland period, from about 100 B.C. to A.D. 500, continues some tendencies developing through the Early Woodland period. Almost no data exists for either the economy or settlements in the Lake Erie Coastal Zone area. Yet, there is some indication of more nucleated settlements and for greater regional differences in most areas. There is some evidence to suggest the increasing importance of horticulture, although subsistence still appears to be based upon hunting and gathering. There is a culmination in Ohio of the Hopewell culture with elaborate geometrical earthworks containing large multiple burial mounds, with status-differentiated burials.

The increase in quantity of exotic items such as copper, mica, exotic flints, and marine shell indicates intensified long-distance trade networks. It is clear that one major center of classic Hopewell, possibly where it achieved its most elaborate manifestations, was the Scioto River Valley in Ohio. It has been theorized that Hopewellian



ceremonial or mortuary traits were often incorporated into local cultures which retained many of their particular cultural patterns.

In the period from A.D. 500 to A.D. 1,000 throughout the Midwest there is a breakdown of the Hopewellian exchange of exotic material. There is also a decrease of the mortuary ceremonialism characteristic of the Middle Woodland period. This does not indicate cultural disintegration, however. No evidence for invasion or population replacement exists. While local populations did not use elaborate ritual artifacts, they did increase in density. There appears to be increasing reliance on maize agriculture and on rescheduling other activities toward this end. Villages appear to be more substantial and increasingly sufficient. The material remains of the early Late Woodland period are rather unspectacular. There is a general sameness throughout most of the eastern United States. Subtle variations in projectile point and ceramic styles mark local cultural groups.

To some degree this variability is the result of the trend through time from seasonal village occupations to more stable year-round habitations in selected areas. Corresponding changes in subsistence patterns are from the rather diffuse economic adaptations of varied emphases on hunting, gathering, and horticulture, to the increasing reliance on maize agriculture.

Unfortunately, within the project area, indeed, within this entire portion of the Great Lakes/Ohio River Valley, few archaeological sites of the period have been documented.



After A.D. 1,000 in the Mississippi Valley, a new "Mississippian" culture developed with some MesoAmerican influence. These Mississippian cultures became increasingly urbanized, agriculturally and socially ranked societies, characterized by population growth; planned town and temple communities; the construction of monumental multistage platform pyramid mounds; a rapid development of sophisticated and increasingly specialized ceramic and lithic technology; and possibly the theocratic organization of the societies. Warfare and unambiguous defensive fortifications made their appearance at this time in eastern North America, as does a new burial ceremonial cult for the elite.

This Mississippian complex does not itself spread far up the Ohio Valley or into the Great Lakes area. Its influences, however, can be seen in this region after about A.D.1,000. In southwestern Pennsylvania and the West Virginia region along the Ohio Valley, the regional manifestations are represented by regional phases of Fort Ancient or Monongahela Culture all with Mississippian influence. One Fort Ancient variant exists into the Historic period as some portion of the Shawnee. In New York and northcentral Pennsylvania, this terminal Late Woodland period sees the diversification of the early Late Woodland populations, similar to those in northern Pennsylvania into the various Iroquoian groups encountered by the French in the early seventeenth century.

In the area of northeastern Ohio, the prehistoric cultures during the period A.D. 1,200 to A.D. 1,600 are represented by archaeological 2-24



phases of the Whittlesey focus. Preliminary analyses indicate a number of small dispersed populations practicing a mixed agricultural and hunting-gathering economy. This adaptation was predicated upon the introduction of reliable maize agriculture from earlier more diffuse economic patterns. During the Late Woodland period, the human role within the ecosystem was minimal. Economic activities were scheduled with summer and early fall occupation in large villages located on promontories from 1.5 to 20 miles from Lake Erie along the main rivers. At these villages, agriculture was limited to the floodplains and the adjacent terraces. Forest-clearing was balanced by hunting restricted to whitetail deer as the primary game. During the late fall and winter, villages were supported by a number of family hunting-camps on adjacent promontories. During this season, the major economic activity was collecting nuts and hunting elk and bear. During the early spring, these villages split into a number of small multi-family groups occupying temporary camps along the bluffs and beaches on river mouths or on Lake Erie itself, where fish and waterfowl provided the major food at this season.

Large Late Woodland villages with Iroquoian-related ceremics have been documented in the Kinzua reservoir regions, southeast of the Erie County coastal zone area after A.D. 1,100. At the same time, a number of additional Late Woodland villages with the McFate ceramics akin to some of the Monongahela tradition pottery are reported along the Erie shoreline near Raccoon and Elk Creeks. They also are found



on the north bank of the Allegheny between the mouths of the Conewango and the Brokenstraw.

Later, by A.D. 1,500, more Iroquoian-looking ceramics analagous to those referred to as the Erie, have been found in a number of scattered Late Woodland campsites in the Erie County coastal zone such as the Griswold Site, the Skyway Theater Site, a component at the Billings 1 Site and the Elk Creek Site (36Er53), 36Er160 and 36Er161. There is a suggestion of population replacements due to climate changes which affected the agricultural groups occupying the Allegheny plateau itself.

2.2.4 Contact Period

The major issue relating to the poorly understood period from A.D. 1,600 to A.D. 1,740 concerns the connection between the latest prehistoric population which inhabited the Lake Erie coast, and the earliest historic accounts of that area. The limited archives document massive population movement, and many Europeanized names of aboriginal groups for which there are no firm or even probable identifications in the documents of the later seventeenth century.

One of these groups, traditionally called the Erie Indians, was completely destroyed by the Seneca by 1654. Although early European documents suggest their occurrence in the Lake Erie Coastal Zone, ethnohistoric and archaeological data of their existence in the study area are scant and inconclusive.



During the period of acculturation (A.D. 1,600 to A.D. 1,770), the European fur trade lead to an emphasis on the collection of deer, bear, and beaver. There was a decrease in the agricultural activities, especially in clearing upland areas. This resulted in an increase of secondary or non-climax forest cover. There is a significant decline in populations of major non-human predators. By the end of this period, the majority of furs obtained in this area represent only small mammals. The human societies display a decrease in seasonal economic activity. Lakeside sites, and presumably the heavy use of fish, ceases. Most early village sites were abandoned, and new populations occur as French and English trading posts. The introduction of European disease under these conditions resulted in rapid population decline; further accelerated by conflict over trapping territories; aboriginal villages were consistently fortified. Major changes in population concentrations are accompanied by major changes in population. By 1740, the area is occupied by Iroquoian groups who had been located in western New York during the 1600's, and the native inhabitants have disappeared from history.

2.3 Summary and Evaluation of Previous Archaeological Research

Prior to 1976, systematic archaeological surveys in Erie County,
Pennsylvania were virtually non-existent. Most research was generally
limited to small excavations and nonsystematic surveys undertaken by
area colleges and a few active amateur archaeologists. Exceptions
include the Frontier Forts and Trails survey undertaken under the



auspices of the Work Projects Administration in the 1930's and 1940's and Mayer-Oakes (1955) inclusion of the area in his evaluation of the Upper Ohio Valley. Data from the former survey was often inconsistent, missing, misplaced and incomplete.

Since 1976, several more systematic archaeological surveys have been undertaken. These were generally limited to small areas of the county which were defined by the need to evaluate properties which are to be directly impacted by public works projects, urban revitalization, industrial development, etc. The goal of such surveys has been to identify sites and to recommend management programs pertaining to sites within the study areas. Among the surveys were the Survey of the COHO Generating Station (Lantz 1981), the Primary Study for a section of the U.S. Steel Environmental Impact Statement (Brose 1978), the Bayfront Access Highway Survey (Claridge 1982). Johnson et al. (1979) conducted an archaeological survey which involved ground inspection and informant interviews for portions of Erie County covered by Fairview and Albion United States Geological Survey 7.5 minute quadrangle sheets.

Most recently, Curtis and Hatch (1981) produced a document for the U.S. Army Corps of Engineers of the entire Lake Erie coastal zone. This report includes a general predictive model but is basically an annotated bibliography. Because this report attempted to deal with the entire post Pleistocene history of the entire south shore, it necessarily has



overlooked certain critical data and has oversimplified other data in its attempts to find economical syntheses which can cover the entire region.

Details of the prehistory are partitioned for this area from northeast Ohio to Erie and from Erie to the New York lowlands, a decision reflected in none of the archaeological data themselves collected during the past three years (c.f. Curtis and Hatch 1981: Sections 3 and 4, pages 3-2 to 4-25). Certainly the ethnohistoric sections covering the Lake Erie Coastal Zone region (Kolb 1981 in Curtis and Hatch 1981; Section 4, pages 4-6 through 4-8) show considerable inconsistency between maps, text, and reference. Curtis and Hatch (1981: Sections 6.1, 6.2, 8.3.2 and 8.3.3) seem to rely upon the nut-bearing tree/forest soil type association as the major determinant in prehistoric site prediction. While perhaps unavoidably broad due to the scope of their project, such reliance cannot be unequivocally supported for either northeast Ohio or northwest Pennsylvania. Nor indeed do Curtis and Hatch fail to recognize this problem. They have stated (1981: 6-6 and 6-7) that factors of stream ranking and defensive topography are central in this region, concluding that at their level of effort,

"Because of the high sensitivity rating that (they had) assigned to the entire lakeshore (in this region,) and the general similarities of key environmental factors throughout, specific (sensitivity) subareas could not be identified."

(Curtis and Hatch 1981: 6-7) Emphases added



Only one County-wide attempt to inventory in detail all known historic and archaeological sites has been attempted. This was undertaken by Brose, Werner and Wolynec (1977) as part of the Secondary Study for a portion of the U.S. Steel Environmental Impact Statement. The purpose of that effort was:

- 1. To consolidate all known archaeological and historic site data in Erie and Crawford Counties, Pennsylvania and Ashtabula County, Ohio.
- To identify and describe all known archaeological and historic sites listed in the National Register of Places, nominated to the Register, or eligible for inclusion to the Register.
- 3. To locate all identified sites on a map.
- 4. To construct preliminary sensitivity maps for each county identifying existing and potential areas of cultural resources which render each area unsuitable for intensive development.
- 5. To make recommendations concerning the management and mitigation of sites to be impacted by the U.S. Steel development and to make recommendations concerning management, etc. of zones of varying cultural resource sensitivity.

The predictive portion of the analysis consisted of the following general steps:

- Environmental data associated with specific site locations were collected for each site.
- 2. The statistical significance of all environmental variables was demonstrated.
- 3. The key variables and, within them, the specific attributes which would succinctly characterize the known sites were isolated. These variables were "topography" and "distance to water."



- 4. They and their attributes were then strictly defined as parameters so that they could be used to demarcate geographic areas suspected of harboring unknown sites.
- 5. The geographic areas were ranked according to their sensitivity or, in other words, the degree to which they predict sites.
- 6. Finally, parameters using "topography" and "distance to water" were tested using the 161 positive-yield samples from the primary study area (2,916 uniform grid samples) of the plant site proper. Since the positive samples were all found in extreme and highly sensitive areas (of a total of 4 areas), it was possible to calculate an actual probability for finding archaeological sites there.

Although Johnson et al. (1979) do not specifically reference this predictive sensitivity analysis, it appears that they used portions of the model to guide aspects of their survey: "Extensive survey work in Ashtabula County in 1971 and particularly around Conneaut, Ohio, and West Springfield, Pennsylvania, in 1977 suggested that this area along with the various late Pleistocene beach strands are the two areas of highest archaeological site sensitivity" (1979:5) (emphasis ours).

With completion of this project, considerable information will be added to the already growing body of site information and a more refined model for major episodes of human prehistoric and historic settlement in the coastal zone will be developed. Such modeling may be crucial to the development of a cultural resource management program within the coastal zone area.

One aspect of the specific research objectives and methodologies proposed for the completion of a useful Historic Resources Protection Plan for the Lake Erie Coastal Zone was the effort to generate, test,

and refine a diachronic predictive model from the analysis of inter- structured to identify areas of archaeological sites and certain structured to identify areas of archaeological site sensitivity within the study area (based upon the refined predictive model).

2.4 Development of a Predictive Model

A major premise underlying any attempt to predict archaeological site locations is that human behavior is patterned. This patterning is a product of the dynamics of interaction of a cultural system with its social and physical environments.

The Lake Erie Coastal Zone in Erie County, Pennsylvania is represented by a varied and rich inventory of environmental variables according to the Pennsylvania Coastal Zone Management Program <u>Technical Record</u> (draft) (1978).

The character of the lake plain separated from the lake by a system of steep bluffs, about 50 minor streams which flow into the lake, the uniqueness of Presque Isle Peninsula, the climate along the lake zone, the quality of the soils, the abundance of a great variety of flora and fauna, among other variables have made this area attractive for human settlement throughout prehistoric and historic times. By examining the interrelationships among environmental variables at given site locations, for a large sample of sites, it was possible to generate a predictive model describing the pattern of site locations for specific classes of functional sites for a variety of cultural periods. The



construction of a predictive model was crucial to the production of a meaningful areal management program. Predictive models generated in the past from neighboring study areas were used in conjunction with coastal zone specific data to develop a synthetic diachronic predictive model for the coastal zone in Erie County. The resulting model was then tested and refined.

To date, there have been several attempts at site prediction for areas which are adjacent to Erie County, Pennsylvania, or which overlap a part with access within Erie County itself. These are discussed in detail in the following documents:

- 1. Cultural Resource Overview of the Allegheny National Forest, Warren, Elk, Forest and McKean Counties, Pennsylvania. (Wolynec et al. 1978)
- NOITS and Crisis Area Investigation: Study of Archeological Sensitivity, Lake County, Ohio. (Lee 1981)
- 3. Archaeological Investigations in the Cuyahoga Valley National Recreational Area. (Brose 1981)
- Discriminate archaeological analyses of Ashtabula County, Ohio, Crawford and Erie Counties, Pennsylvania. (Brose, Werner, Wolynec 1977)
- Regional SH10 Survey in Northwest Pennsylvania.
 (Johnson, Richardson and Bohnert 1979)

Each of these research areas shared certain environmental characteristics with the others to a greater or lesser extent. Although each study area was different in many respects from the coastal zone, there were sufficient similarities in environmental characteristics to warrant a closer examination of the applicability of aspects of



each predictive model to the problem of developing a predictive model for the Lake Erie Coastal Zone.

Each predictive model was based upon a variety of factors including, but not limited to, specific site locations, environmental variables, availability of natural resources (past and present) and land form data (past and present).

Preliminary steps to the development of a predictive model were as follows:

- 1. To define exactly the geographical area included in the Lake Erie Coastal Zone.
- 2. To identify and locate major environmental characteristics within the coastal zone.
- 3. To identify and locate known archaeological sites within the coastal zone.
- 4. To identify, where possible from available existing data, cultural episodes associated with each known archaeological site within the coastal zone (e.g. Paleo-Indian; early, middle, late Archaic; Transitional Archaic; early, middle, late Woodland (including more specific cultural designations such as Adena, Hopewell, etc.); protohistoric and historic Indian).
- 5. To identify, where possible from available existing data, functional characteristics of sites associated with different cultural episodes.
- 6. To define the set of environmental variables which define the location of each archaeological site within the coastal zone.

These data were gathered and organized, and the examination and application of existing predictive models from neighboring areas was initiated.



Comparisons made among the four previously cited predictive models were structured:

- 1. To identify classes of environmental zones which occur in all five product areas being compared with those which occur in the coastal zone.
- To compare predicted patterns of archaeological site locations defined for classes of environmental zones which occur in all five project areas and compare these to distributions of sites within similar environmental zones located in the coastal zone.
- 3. To identify classes of environmental zones which are unique to each of the five areas but which occur in the coastal zone.
- 4. To compare predicted patterns of archaeological site locations defined for classes of environmental zones unique to each zone but which occur in the coastal zone and compare these to distributions of sites within similar environmental zones located in the coastal zone.

On the basis of such comparisons, an initial synthetic predictive model was developed which was tested and refined as follows:

- By identifying and plotting areas within the coastal zone which represent environmental conditions on a scale ranging from most important (extreme sensitivity) for prediction to least important (minimal sensitivity) for prediction of site location.
- 2. By looking for corresponding correspondence between predicted site locations and actual known site locations in the coastal zone:
 - (a) To identify areas where sites are present or absent as predicted.
 - (b) To locate areas where the model defines a high probability of site occurrence but where no sites are known to exist.
 - (c) To locate areas where the model defines a low probability of site occurrence but where known sites do exist.



Initially, a summary synthetic environmental ranking system was created. This system is shown as Table 2-4. Next, the requisite environmental variables were plotted as a series of Mylar overlays at a 1:50,000 scale (Commonwealth of Pennsylvania, Department of Environmental Resources Topographic and Geologic Survey map of Erie County Pennsylvania) for the entire Lake Erie Coastal Zone study area. An arbitrary selection of 12 known sites (two in the Borough of North East, six in the City of Erie, and four in Girard Township) had had a summary synthetic environmental ranking calculated. All of these known sites were located in zones of moderate, high, or extreme sensitivity. Refinement of the model through field investigations took place during the remaining phases of the project.

The examination of areas where site occurrences are not as predicted further contributed to refining the model. First, specific environmental areas were identified for which a disparity occurred between predicted site location and actual site location. The disparities were then evaluated on the basis of ground inspection and subsurface testing. Specific test areas were selected from a selection of environmental areas where disparities were identified. Additional selection criteria for a test area included the integrity of the surface (e.g. least disturbance), quality of ground cover, and accessibility, among other considerations. Each selected test area was gridded into 20 meter squares and visual surface inspections of each square were supplemented by excavation tests at 20 meter intervals.

Table 2-4

ERIE COUNTY COASTAL ZONE MANAGEMENT

SUMMARY OF SYNTHETIC ENVIRONMENTAL RANKS



WEIGHTED RANKING

CEOMO	ישססו	OLOGY.

Fossil Glacial Lake Beach Ridge	1
Kame and/or Kame Terrace	4
Recent Alluvial Formations	9
Outwash Plain/Morain	16
Lake Bed Deposits	25

SOIL TEXTURE CLASS

Well Drained/Sands over Gravel	1
Moderately Well Drained/Sands or Sandy Loams	4
Poorly Drained/Silt Loams or Clay Loams	9
Very Poorly Drained/Silty Clays or Clay	• 16
No Drainage/Bogs, Muck, Gleyed Soils	25

TOPOGRAPHY

Modern Lakeshore Bar, Beach Ridge or Dunes	1
Active River Terrace (T ₁ , T ₂ or T ₃)	4
River Bluff Edge	9
Floodplain (T ₀)	16
Other	25

AREA DISTANCE TO KNOWN SITE

150 to 350 meters	1
less than 149 meters	4
351 to 500 meters	9
501 to 700 meters	16
greater than 700 meters	25

FIRST DRAINAGE SYSTEM (less than 350 meters) X JUNCTION OF SECOND SYSTEM

Primary Tributary	1 2	
Lake Erie	2 7 7 7 1	_
Second Order Creeks	3 ft t g 4	
Bog/Kettle/Pond	4 H v 7 3	•
Third Order Stream	5 🛱 મું છે 5	•
None	6 % 14 6	_
	e i o o o o o o o o o o o o o o o o o o	
	ઈ ∓ો કે	



Table 2-4

ERIE COUNTY COASTAL ZONE MANAGEMENT SUMMARY OF SYNTHETIC ENVIRONMENTAL RANKS

(continued)

RELATIVE DEGREE OF DISSECTION SYSTEM (16HA Areas)

Difference in Elevat	ion	X	Average Slope	of Area
30 to 60 feet 60 to 80 feet 0 to 30 feet 80 to 120 feet 120 feet	1 2 3 4 5	(Cross multiply, then product = weighted rank)	0 to 6° 6° to 12° 12° to 17° 17° to 22° 7 22°	1 2 3 4 5

All missing data get weighted rank of 12

For each area, compile preliminary weighted sum score by multiplying each of the six environmental weighted ranks.

Then take log (base X) of square root of preliminary weighted sum score.

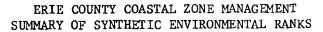
Below is a table of possible values:

All Environmental Weighted Ranks =	Preliminary Weighted Sum Score, (PWSS)	PWSS	Logx
1	1	1	. 0
4	4096	64	4.16
9	531441	729	6.59
16	16777216	4096	8.32
25	244140625	15625	9.66
25 or more	351562500	18750	9.84

Where all values are missing, $\log_x = 7.45$

Where 3 values = 1 and 3 values = 4, then log_x = 2.08

Table 2-4



(continued)

AREA SITE SENSITIVITY RANKING FOR FINAL VALUES

Extreme Sensitivity	0 to 2.08
High Sensitivity	2.08 to 4.16
Moderate Sensitivity	4.16 to 6.59
Fair Sensitivity	6.59 to 7.45
Poor Sensitivity	7.45 to 8.32
Minimal Sensitivity	8.32 to 9.84

If further grouping is needed, we would go:

High 0 to 4.16 Moderate 4.16 to 7.45 Low 7.45 to 9.84





Such examinations facilitated a determination if a disparity is due to specific unique local environmental variables or an individual site's uniqueness (among other sources). Further testing of the predictive model was undertaken in areas of the coastal zone where little or no archaeological site data were available using the techniques and judgements outlined above. Consequently, the model was further refined. Archaeological site or historical site data discovered during the testing phase have been recorded on the appropriate State of Pennsylvania Survey forms.

Although the predictive model was developed from archaeological site data, it is expected that it may be of some use in predicting locations of historic sites. Certain environmental characteristics may have been attractive for settlement throughout the duration of human occupation in the area. This possibility should be examined in future studies.

2.4.1 Testing the Model

Having developed a ranking for potential archaeological sensitivity of all areas of the Lake Erie Coastal Zone study area, it was necessary to test the results initially by determining whether those previously known archaeological sites in Erie County, Pennsylvania actually occurred in areas which the model predicted to have high archaeological sensitivity. It should be noted that this step in model verification was not tautological. The known Erie County sites were not the known sites used for the predictive model development but rather represented



an independent data set for testing. It was thus gratifying to discover that 48 out of 62 known archaeological sites (77.4 percent) within the study area (see Appendix A) occurred in areas of high sensitivity. The only known site which occurred outside of these areas, Site 35Er121, appears to be a small, plow disturbed, lithic scatter with few diagnostic materials which were attributed to a general Archaic time period. It was located in an area predicted to have moderate archaeological sensitivity.

The accuracy rate of over 98 percent was considered to be an excellent result. It is, however, likely that a number of additional small archaic upland sites may also occur in similar upland areas of moderate archaeological sensitivity. It does not appear that such sites are rich enough in recoverable data, or would sufficiently retain horizontal context to render them eligible for inclusion on the National Register of Historic Places.

Because this document is to be used as a planning tool, additional detail concerning the development of the predictive model and various testing phases associated with its development were not included in this discussion. This detail is available in the <u>Technical Report</u> on file with the Pennsylvania Historical and Museum Commission, located in the William Penn Museum, Harrisburg, Pennsylvania.



2.4.2 Identification of Sensitive Areas for Planning Purposes

Once the predictive model was tested and refined, the information was organized into a visually accessible form. Areas of high, moderate, and low probability of site occurrences were plotted on a map (Figure A-1). It is this map which should be of great utility to the planner. Given a specific area targeted for a particular project the planner will be able to examine the specific location on the map and thereby determine whether or not the target area is likely to yield archaeological resources. If the area is coded as high sensitivity, there is a strong likelihood that archaeological sites will be found. If the area is coded as moderately sensitive, archaeological sites are less likely to occur than in highly sensitive areas. If the area is coded as low sensitivity, then there is little likelihood that a site may be found there.

Chapter 4 discusses specific courses of action open to the planner for examination of high, moderate, or low sensitivity areas.

2.5 Prehistoric Archaeological Resources

Although Erie County, which includes the coastal zone study area, has attracted little systematic archaeological inquiry, it may be assumed that general patterns of socio-cultural development in pre-historic times follow general patterns in better documented surrounding areas in the Eastern Woodlands. Consequently, cultural assignments of sites (and consequently temporal assignments) have been traditionally made by comparing remains to those found in a study area with better



documentated sites in adjacent areas of New York, Pennsylvania and Ohio.

Three major cultural periods have been identified as potentially representing cultural behavior within Erie County and therefore within the coastal zone study area. These cultural periods will serve as the organizational framework for presenting the inventoried prehistoric sites. The summary information defining each period is taken from Kent, Smith and McCann (1971: 4). Because specific paleoenvironmental data are lacking for this area, these will not be speculated upon in this summary.

Altogether, 59 prehistoric archaeological sites were inventoried. Of these, 14 were discovered by the study team while in the process of testing the predictive model. A thematic summary follows in the succeeding section.

2.5.1 Paleo-Indian (c. 10,000 B.C. - 7,000 B.C.)

The Paleo-Indian cultural period is the least known of all possible cultural periods in the study area. Based upon general characteristics from neighboring areas, the following characteristics might be applicable:

Social organization: Band Subsistence: Hunting and gathering Artifacts: Fluted points; scrapers; knives; gravers

2.5.1.1 Resources Inventoried

No known Paleo-Indian sites were found. Indeed, if Paleo-Indian cultures were attracted to the lakeshore in the past, it is unlikely that their remains exist to be found by archaeologists. According



to Dr. Paul Knuth of the Edinboro State College Geosciences Department, the shoreline 9000 years ago was three miles further into Lake Erie (personal communications). Therefore, any sites located within this three mile area would, of course, have been washed away as the shoreline eroded. Extensive erosion and rechanneling of most stream beds in the coastal zone have obliterated evidence of early sites along their banks.

2.5.2 Archaic (7,000 B.C. - 1,000 B.C.)

Social organization: Band

Subsistence: Hunting and gathering

Mobility: Restricted seasonal wandering scheduled

according to the availability of resources

Artifacts: Various spearpoint and knife forms (often

notched); grooved axes; adzes; atlat1 weights;

pestles; mullers; choppers

2.5.2.1 Resources Inventoried

Twelve possible Archaic sites were discovered prior to this study. Two of these, the Phillips Site (36 Er8) and the Peterson Site (36Er88) may have been destroyed by gravelling and bulldozing activities.

The sites found represent, with two exceptions data gathered from surface finds and some testing. Some excavation has taken place at the Elk Creek Terrace Site (36Er161) and 36Er154. The latter, Sommerheim Park Locus 1, has had paperwork submitted for consideration of inclusion in the National Register of Historic Places. Four additional possible Archaic sites were found while testing the predictive model for this report. Evidence of Archaic activity is present in definite multicomplnent sites to be discussed separately.



Shoreline erosion may have destroyed many Archaic sites.

According to Knuth, the shoreline was one and a half miles further into the lake 3,000 years ago.

2.5.3 <u>Transitional</u> (1,800 B.C. - 800 B.C.)

Although the transitional period is often included in Late

Archaic or Terminal Archaic, its continued traditional use within the

study area by amateur and professional archaeologists requires its

inclusion as a distinct cultural period.

Social organization: Band

Subsistence: Hunting and gathering; a heavy dependence on

riverine resources

Mobility: Far ranging mobility; some occupation of temporary

hamlets

Artifacts: Fishtail and broad spearpoints; soapstone cooking

vessels

2.5.3.1 Resources Inventoried

Only one possible Transitional Period site was discovered. This was found while testing the predictive model along Twelvemile Creek.

Evidence of possible Transitional period is found in multicomponent sites to be discussed later.

2.5.4 Woodland (1,000 B.C. - A.D. 1,550)

Because of major changes in development, the Woodland Period is divided into three parts.

2.5.4.1 Early Woodland (1,000 B.C. - 300 B.C.)

Social organization: Bands of family units living in

scattered households

Subsistence: Hunting and gathering

Mobility: Possible shift in some areas to semi-sedentary

settlement due to more stable economic base

Artifacts: Interior-exterior cord-marked pottery; plain

flat-bottomed vessels; side-notched and expanded stemmed points; tubular stone pipes; adzes; net

weights; birdstones; gorgets.



2.5.4.1.1 Resources Inventoried

Three possible Early Woodland sites were inventoried prior to this study. One of these, the Payne-Spicer Mound (36Er146), is a questionable site. Dr. Charles Kolb of Behrend College (see inventory form) believes it to be a glacial drumlin. No artifacts have ever been found in association with the disputed "mound." Early Woodland components have also been identified in multicomponent sites to be discussed later.

2.5.4.2 Middle Woodland (500 B.C. - A.D. 1,000)

Social organization: Incipient tribal village life in

western Pennsylvania

Subsistence: Horticulture; hunting and gathering

Mobility: Seasonally sedentary

Artifacts: Diversification of cord- and net-impressed

pottery; side-, corner-, and basal-notched spearpoints; platform pipes, elbow pipes;

celts; burial mound complexes.

2.5.4.2.1 Resources Inventoried

With the exception of a small number of multicomponent sites which include Middle Woodland Period components, no sites representing this cultural period were inventoried.

2.5.4.3 Late Woodland (A.D. 1,000 - A.D. 1,500)

Social organization: Tribe

Subsistence: Horticulture, hunting and gathering. Mobility: Seasonally sedentary villages and hamlets

(some stockaded villages)

Artifacts: Cord-marked and/or incised decorated pottery;

triangular projectile points; bow and arrow; elbow and vasiform pipes; celts; various bone

tools and ornaments.



2.5.4.2.1 Resources Inventoried

Two sites have been inventoried. Of these, one, the Griswold Site (36Er62), is a site well-tested by Dr. William Englebrecht in association with Edinboro State College. Additional evidence of this cultural period was found at multi-component sites to be discussed later.

Three additional sites were identified in the inventory as either Woodland or Proto-Iroquois (Proto-Erie). Of these GI-3 (no other name) (35Er55), is now a housing development.

Two other sites were identified as Late Prehistoric. There is currently insufficient evidence to identify these sites as Erie.

2.5.5 Multicomponent Resources Inventoried

Sixteen multicomponent sites were identified including two while testing the predictive model.

These range from Early Archaic through historic times. The majority of the multicomponent evaluations of these sites are based upon surface scatter. Two sites, the Sommerheim Park Locus 2 (36Er155) and the nearby Sommerheim Site (36Er68) have been tested (the latter excavated). Both have been suggested for evaluation of eligibility for inclusion in the National Register of Historic Places.

Sixteen additional sites were inventoried which were of unknown affiliation. Of these, Sommerheim Park 4 (36Er147) has been suggested for evaluation of eligibility for inclusion in the National Register of Historic Places. Of these, seven were discovered when testing the



predictive model. Appendix A includes the survey forms representing all sites inventoried. Figures A-2 through A-7 show their location.

2.6 Historical Archaeological Resources

2.6.1 Resources Inventoried

Few archaeological resources have been inventoried representing historic remains. Only recently, given archaeological survey requirements associated with environmental impact statements, have such sites been recognized as worthy of survey attention. For example, Claridge (1982) identifies a number of potential archaeological sites of historical significance within the bayfront highway access area in the City of Erie. These include the Cascade Shipyards at the mouth of Cascade Creek in Erie (one of the two shipyards that were established at Erie to construct Perry's Fleet in 1812-13); the northern terminus of the Beaver to Erie Canal at the foot of Sassafras Street in Erie; the navy receiving yard (the other shipyard established in Erie Harbor to built Perry's fleet); the French and British Forts Presque Isle at the foot of Parade Street in Erie.

Altogether, ten sites were inventoried from existing State survey records, Claridge's report (1982) and the City of Erie Historic Sites Survey (Wolynec 1982). Resources represented in the inventory include a hospital and store house, forts, a ship's graveyard, a cemetery and site of a log church, a "dump," a surface scatter of debris, shipbuilding yards, and the terminus to the Beaver to Erie Canal.



2.6.2 Status, Recognition, Protection and Conclusions

No historic archaeological sites in the coastal zone study area are on the National Register of Historic Places. There is insufficient evidence from either test squares or excavations to determine the condition or extent of many of these sites let alone their eligibility for the Register. One site, the historic dump, 35Er158, has been included in the possible Sommerheim Park Archaeological district.

2.7 Summary, Recommendations and Conclusions

2.7.1 Prehistoric Archaeological Resources

The previous thematic summary is obviously incomplete and certainly potentially misleading. The majority of cultural period assignments listed on the inventoried forms are based upon a paucity of information. For example, the Ingersoll Ridge #2 (36Er87), is listed as a multicomponent Archaic campsite and a historic site represented by an old farmhouse. The data upon which this determination was made consisted of "only flint chippage was excavated around the foundation of an old farmhouse" (see inventory form 36Er87). Certainly, "flint chippage" is not exclusive to the Archaic nor is it diagnostic of a campsite. Such casual determinations are not unique within the inventory. Very few sites have been tested systematically let alone systematically excavated. Among the noteworthy exceptions are sites located at the mouth of Elk Creek, the proposed Sommerheim Archaeological District, and the Griswold Site. The Sommerheim Park group of sites has been



recommended to the Pennsylvania Historical and Museum Commission by Mr. Jude Kirkpatrick, project director, Gannon University, for inclusion in the National Register of Historic Places.

The Elk Creek Public Access Site located within the Elk Creek

Complex has been recommended for inclusion in the Register by Dr. David

Brose, Cleveland Museum of Natural History, for the Northwest Institute

of Research, as part of this contract with the Pennsylvania Historical

and Museum Commission and the Division of Coastal Zone Management

(Brose 1982). The Griswold Site is being evaluated by Dr. William

Englebrecht, State University College of New York at Buffalo (excavations having been done under the sponsorship of Edinboro State College).

It is possible that this site will also be eligible for the Register.

Given the quality of data represented by most sites inventoried and the often casual determinations of cultural affiliation and function of sites, one can legitimately conclude that very little is currently known of the prehistoric peoples who occupied the coastal zone study area. What is known is that prehistoric people did occupy the coastal zone and there there appeared to be a certain amount of patterning to the location of their sites of activity. This patterning was indicated by the success of developing the predictive model for this report.

2.7.2 Historic Archaeological Resources

The small number of historic archaeological sites inventoried is not a fair sample of the potential number of such resources nor their



potential quality. It is expected that systematic surveys would uncover remains of the earliest settlers to the coastalzone, especially at stream mouths where the earliest settlements occurred. Mills, residences, stores, and outbuildings are among the resources to be potentially discovered.

Even such well known historically significant sites as the French and British Forts Presque Isle require serious systematic excavation so that the extent to which their remains are still intact can be determined. The excavation of these sites may yield valuable insights into daily life at the forts, their physical form, etc. as well as data concerning the earliest American settlers to the area.

Certainly, the coastal zone study area should hold great rewards for the professional archaeologists who pursues historic data. Unfortunately, to date, historical archaeology within the coastal zone study area has been almost non-existent.



3.0 PART 2: HISTORIC RESOURCES

This section of the report focuses upon the above-ground historic resources found within the Lake Erie Coastal Zone. It includes a summary of the history of the area, a discussion of previous historic researches in the area, the methodology of completing the historic state inventory of sites within the coastal zone, a thematic breakdown of inventoried sites, and recommendations for consideration of sites for inclusion in the National Register of Historic Places. For the purposes of this report, an above-ground historic site is defined as a structure, building, monument, object, etc. which is currently visible within the Lake Erie Coastal Zone dating from the initial years of European contact and settlement in the area to the present.

3.1 Historic Background

3.1.1 Antecedents to Settlement, prior to 1800

Both the French and the British actively contended for the study area. Early in 1753, an advance party of a 2,200-man French military expedition landed at Presque Isle Peninsula and at the mouth of the stream eventually known as Mill Creek, thus ushering in the era of European occupation of the coastal zone. Their purpose was to construct a chain of forts from Lake Erie to the forks of the Ohio River to secure the area from English-American penetration from the east (Kent 1954).



They built Fort Presque Isle on the west bluff of Mill Creek near its mouth. A portage road was erected between it and another fort, Fort LeBoeuf (at present-day Waterford) some 14 miles to its south (Kent 1954; Schoenfeld 1979).

The French maintained their forts in the area until 1759 until British military pressure, related to the French and Indian War, forced them to abandon and destroy both Forts Presque Isle and LeBoeuf.

In 1760, the British erected new forts at the locations of their French predecessors. Both British forts were burned by Indians in 1763 as part of a general uprising known as Pontiac's Rebellion (Whitman 1884).

Neither military occupation brought with it non-military colonists. Not until the 1790s did settlers, Americans in this instance, arrive in the area.

The coastal zone is located in northern Erie County, part of an area once referred to as the Erie Triangle. A number of states, including Massachusetts, Connecticut, New York and Pennsylvania claimed the triangle as their own. To facilitate matters, the Federal government acquired the triangle area which it in turn sold to the Commonwealth of Pennsylvania. This gave the Commonwealth a potential future port on the Great Lakes. To assure the development of the port as quickly as possible, the General Assembly of Pennsylvania adopted legislation in 1792, amended in 1795, reserving an area for the future City of Erie and providing for a systematic street survey of the community (Whitman 1884).



The survey was undertaken by General William Irvine and Andrew Ellicott in June 1795. Ellicott had extensive survey planning experience including the layout of the streets of Washington, D.C. The northern half of each of three surveyed sections was located in the coastal zone, as was the northern portion of an out-lot area (Ellicott's Map 1795; Whitman 1884).

In the spring of 1795, before the surveyors arrived, a detail from General Anthony Wayne's western army built a blockhouse to the east of Mill Creek. A sawmill, the first in Erie County, was built at the mouth of Mill Creek the following year thus giving the name to the stream. Wayne, himself, arrived at the blockhouse in December 1796 on his way home to southern Pennsylvania. He died there due to serious illness and was buried beneath the blockhouse. A replica of the blockhouse, built in 1880, now stands on or near the site of the original structure on the grounds of the Pennsylvania Soldiers and Sailors Home (Miller 1909).

Despite this activity, by 1800 less than 100 persons lived within the area defined for the City of Erie. Outside the area of the city plan, settlement activities concentrated along stream and stream mouths where sawmills and grist mills eventually sprang up. Farming was a major activity. This pattern of urban-rural development persisted within the coastal zone to the present day. The City of Erie remains the focal point of political, economic, social, etc. activity within the coastal zone.



3.1.2 Settlement Patterns, 1800-1850

3.1.2.1 Political Developments, 1800-1850

In March, 1800, the Pennsylvania General Assembly created Erie County. However, since Erie County was too sparsely populated at the time (there were only 1,468 people in Erie County in 1800) to maintain a county government, it was attached to Crawford County in April, 1801. In 1803, Erie County was reorganized with the village of Erie designated as the county seat of government.

In March, 1805, the Pennsylvania General Assembly adopted legislation incorporating the Borough of Erie. The new borough consisted of the first section of Andrew Ellicott's 1795 survey. The government of the borough as originally established consisted of a Burgess and a Town Council of five. This form of government was maintained until Erie became incorporated as a third-class city in 1851.

The Borough of North East was incorporated in 1834; Girard in 1846.

3.1.2.2 Transportation Trends, 1800-1850

Erie County's first overland route was the road constructed by the French in 1753.

With the beginning of the salt trade around 1800, the Old French Road proved to be a most unsatisfactory route. Barrels of salt were brought from western New York State by boat on Lake Erie to the village of Erie. The salt was transferred to ox-drawn wagens and hauled overland to Waterford. At Waterford, the salt was loaded on flatboats or



keelboats and floated down French Creek and the Allegheny River to Pittsburgh. Because of its use as a preservative, salt was at the time an especially valuable commodity and was even used in early Erie as a medium of exchange because of the dearth of money in the frontier community. In 1806, work was begun on a turnpike to replace the road and it was completed in 1809. The turnpike was to the west of the Old French Road and ran generally parallel to it; present Route 19 is to a considerable extent a modern-day replication of the turnpike (Whitman 1884).

During the heyday of the salt trade, as many as one hundred wagons could be viewed on the turnpike at one time. Three warehouses were erected at Erie near the mouth of Mill Creek (the original harbor of Erie) to store the salt before its transshipment south. In 1813, salt was discovered near Pittsburgh and by 1819 the salt trade through Erie County had all but ceased to exist. While it lasted, it provided employment for many local residents and contributed considerably to the economy of early Erie (Rosenburg 1974).

In 1805, two important roads were opened which eventually connected Erie County with Buffalo, New York to the east and Cleveland, Ohio to the west. The Buffalo Road (present Route 20) followed the first ridge running south from the lake shore. It was opened in 1805 and provided an overland route from Erie eastward to the New York State line. Originally, the Buffalo Road terminated at the Borough of Wesleyville just east of Erie. Travelers had to go north from Wesleyville to the Lake Road and follow it into Erie at Sixth



Street. In 1812, the Buffalo Road was extended directly westward from Wesleyville and entered Erie at Eighteenth Street, following that route until it intersected with Parade Street. The Ridge Road, also opened in 1805, was virtually a westward extension of the Buffalo Road, running along Twenty-sixth Street from its intersection with Peach Street through Fairview, Girard and Springfield Townships to Ohio. In 1806, the above-mentioned Lake Road was laid out entering Erie from the east at Sixth Street and exiting west at Eighth Street. Thus, this road was located somewhat to the north of both the Buffalo and Ridge Roads and approximates Route 5A through Erie today.

The Buffalo and Ridge Roads were a major route of stage travel between Buffalo and Cleveland. Wayside inns and stage stops sprang up along its extent. Indeed, the development of certain communities such as East and West Springfield was encouraged by the popularity of their public houses among travelers of these roads.

The early phases of development of the Borough of North East were also encouraged and strengthened by its strategic location along the eastern portion of the road.

In December, 1844, the coastal zone was introduced to the canal era when two horse-towed canal boats--one hauling coal from Mercer, Pennsylvania, and the other carrying passengers--arrived in the City of Erie on the recently completed Erie Extension Canal, the northern-most section of the Beaver and Lake Erie Canal system. Erie became the northernmost terminus of a canal system which linked the Ohio



River west of Pittsburgh with Lake Erie. The project was begun in 1831 at the Ohio River and was extended northward over a period of fourteen years. The canal system was originally financed and owned by the Commonwealth of Pennsylvania. In 1842, the State deemed that the venture was too expensive and decided not to complete it. By this time, the State had expended four million dollars. There were less than forty miles of the canal unfinished. At this point, a group of enterprising Erie entrepreneurs had formed the Erie Canal Company with Rufus Seth Reed as president and his son Charles Manning Reed as treasurer. By arrangement with the Commonwealth, the Erie Canal Company agreed to finance completion of the project and when this was done, the State would turn the entire canal system over to this private concern. The arrival of the two canal boats in December, 1844, heralded the completion of the canal system to Erie (Whitman 1884).

The Erie Extension Canal entered Erie County at its southwest corner in Conneaut Township, ran through the boroughs of Albion, Cranesville, and Lockport (Platea) diagonally in a northeast direction, then headed more directly north through the borough of Girard, from whence it continued on a more easterly course (running north of the borough of Fairview) until it reached Erie. The canal terminated in a large boat basin circumscribed by loading docks at the bay between Peach and Sassafras Streets (Brenner 1967).



Within the City of Erie, there were a number of locks while bridges over the canal were located at Fourth, Sixth, and Eighth Streets. In an area bounded generally by Seventh, Eighth, Chestnut and Myrtle Streets was located the so-called "Weigh-lock Basin," which was the final destination for many of the canal boats. Passengers disembarked from the packets at this point. Coal and iron were among the more important commodities carried by the canal boats. Between Tenth Street and the bay a number of commercial enterprises were established along the route of the canal including warehouses, coal yards, mills, potteries, malt-houses, a cooperage, a sash factory, a refinery, and a large gas works that served the city.

Erie was not the only community to benefit from the canal.

Throughout its extent, especially in areas associated with locks and crossroads with roadways such as Ridge Road (e.g., Girard), settlers and enterprises were attracted and communities strengthened.

The Erie Extension Canal remained in operation until September, 1871. At that time, an aqueduct spanning Elk Creek west of the City of Erie collapsed. The Pennsylvania Railroad, which had acquired the canal in 1870, decided not to repair the aqueduct and the canal was closed forever. Prior to that, the canal had been confronted with stiff competition from the railroads. The canal boats were too slow and too small to ward off this technologically superior challenger.



3.1.2.3 Economic Development, 1800-1850

As was typical of frontier communities with an abundance of timber and water power, the first "manufacturing" enterprises in the coastal zone were sawmills. Initially, the earliest settlers were often attracted to the mouths of streams along the coastal zone where they built their sawmills and adjoining grist or flour mills. These attracted other commercial enterprises such as taverns. These localities served as foci of early community development throughout the coastal zone, outside the future City of Eric. Aside from industries which catered to local building and farming needs, additional industries sprang up throughout the coastal zone such as a tannery at 5th and Holland in Eric (1800), a brickyard in Eric east of Parade Street between 2nd and 3rd Streets (1803), a foundry in North East Township (1824), and a papermill at the mouth of Walnut Creek (1829) among a number of others.

By the 1840's a number of commercial enterprises were thriving along the Erie Extension Canal as mentioned previously (Miller 1909; Spencer 1962).

Erie remained the focal point of economic development even though boroughs such as North East were developing rapidly. Special opportunities tied to its stragetic position along the lake enhanced Erie's position in the economic area.

Because of Erie's fine harbor, it was only natural that shipbuilding would become one of the city's early enterprises. The first



vessel built at Erie was the Good Intent, a one-masted, wooden sloop constructed in 1799 at the mouth of Mill Creek. Shortly other sloops ranging in length from about forty to fifty feet were also built at Erie. Several years later, sixty to seventy feet long, two-masted schooners were being built at Erie (J. DeGeorge 1975). It was because of Erie's outstanding harbor facilities and abundance of timber that the community was chosen as the site of the construction of the American Lake Erie fleet during the War of 1812. The details of this momentous event in Erie's history are well known and will be described only briefly here to illustrate patterns of settlement. Although Erie was little more than a frontier village in 1812, with only about four hundred permanent residents, the U.S. government authorized Erie native Daniel Dobbins to build a small fleet of ships there. Work was begun in September, 1812 and completed in July, 1813. Three vessels were built in the harbor at the mouth of Lee's Run (which later became part of the Erie Extension Canal), while three more were constructed at the mouth of Cascade Creek about one mile to the west. The largest of these ships were the two brigs, Niagara and Lawrence, whose decks were only one hundred feet in length. The victory of this American fleet, commanded by Commodore Oliver Hazard Perry over a British fleet in September, 1813, unfortunately often overshadows Erie's significant contribution in building the fleet (Rosenburg 1974).



Erie was initiated into the age of steam power in 1818 when the Walk-in-the-Water, the first steamboat on Lake Erie, visited the port of Erie on its maiden voyage from Buffalo, New York. By 1826, the first Erie-built steamboat, the William Penn, had been launched.

After that in the 1820's and 1830's, a number of other steamboats were built in the harbor of Erie. The Reed family of Erie was especially prominent in the building of steamboats in their hometown and operated a successful line of commercial steam vessels on the Great Lakes, helping to enhance Erie's position as a lake port. In 1843, the first iron-clad, steam-powered ship to operate on Lake Erie, the U.S.S.

Michigan (later renamed the Wolverine) was assembled at the foot of Peach Street in the Erie harbor. It was used by the U.S. Navy for eighty-one years to patrol the Great Lakes. Every winter, the Michigan was stationed at the Port of Erie (Whitman 1884; Spencer 1962).

3.1.2.4 Population Trends, 1800-1850

The population of Erie burgeoned temporarily while the fleet was under construction in 1812-1813 as shipbuilders, sailors and soldiers were brought in. Erie did not benefit greatly from the War of 1812 as far as permanent population growth was concerned. In 1820, the population of the community had stabilized at 635. In the 1820's, several neighborhoods developed which were gradually absorbed by the expansion of the built-up portions of Erie.

The maturation of the City of Erie was symbolized by the establishment of a branch of the United States Bank of Philadelphia in 1839.



This magnificant Greek Doric structure, built to house the bank, still stands on the east side of State Street between Fourth and Fifth Streets. When the parent bank failed, the building containing the Erie branch was eventually sold to the United States Government in 1849. It was used as a custom house (and for awhile also as a post office) until the 1880's.

By the 1840's, a significant amount of development could be found along the Erie Extension Canal as previously indicated. The growth of the population of the west side of Erie was reflected by the construction of a substantial brick public school building in 1848 at Seventh and Myrtle Streets.

Not only had the population increased, but the ethnic and religious character of early Erieites also experienced a significant metamorphosis. During the early years of the nineteenth century, Erie's people remained largely English and Scot-Irish in ancestry and protestant in religion. In the 1830's and 1840's, substantial numbers of Germans arrived in Erie, many of them of the Roman Catholic persuasion. Churches and schools formed the nuclei of their communities.

Erie's social development was paralleled to some extent throughout the coastal zone. Whenever centers of commercial development were found, churches were organized, schools were built and new settlers were attracted, necessitating more schools, a post office, more churches, etc. Indeed, education and religion were two very apparent and important axes of social organization. For example, the first school



building to be used exclusively for school purposes was built in 1789, two miles west of North East Borough along Buffalo Road.

The first church in North East was built in 1804. Indeed, the North East area experienced an early population expansion very evident in the number and diversity of churches which sprang up in the early 1800's and continued in strength into this century.

3.1.3 Settlement Patterns, 1850-1900

3.1.3.1 Political Development, 1850-1900

The second half of the nineteenth century found the coastal zone communities continuing their growth both in population and in enterprise. The focus of this growth and development remained within the City of Erie. By 1851, its population had grown sufficiently to warrant the incorporation of Erie as a third-class city. The Office of Mayor was created to replace that of Burgess. This form of government continued until 1913 (Behan 1974). To accommodate the increase in municipal business due to Erie's enlarged population, a new city hall was completed in 1895 at the southeast corner of South Park Row and Peach Street.

Population increases in the City of Erie and in nearby communities in the coastal zone were spurred by increased economic activity which in turn was spurred by new opportunities for transportation. Fairview was incorporated in 1868 and East Springfield in 1887.

3.1.3.2 Transportation Trends, 1850-1900

As the new roads and the canal played an important part in community growth in the first half of the nineteenth century, so was the



railroad an important growth factor during the second half of the century. The first railroad into Erie was the Erie and Northeast Railroad completed in January, 1852. This connected the City of Erie eastward to the Pennsylvania-New York State line. In November, 1852, another railroad line was completed into Erie. This, the Franklin Canal Company (a subsidiary of the Cleveland, Painesville and Ashtabula) linked Erie westward to the Pennsylvania-Ohio border. Both the Franklin Canal Company and the Erie and Northeast Railroads went through several consolidations before both became part of the Lake Shore and Michigan Southern Railroad in 1869. Eventually, this latter line was absorbed into the New York Central system (Miller 1909). Two other railroads extended their lines to the Erie bayfront. The first was the Sunburg and Erie Railroad (incorporated into the Philadelphia and Erie Railroad in 1861) in 1859, terminating near the bayfront at the company's freight depot at the foot of State Street. The second to reach the bayfront, the Erie and Pittsburgh, completed a spur into the City in 1864. This originally terminated at the foot of Cascade Street where a large docking facility was maintained. By 1870, the line had been extended eastward to the foot of Myrtle Street. Eventually, the Erie and Pittsburgh and the Erie and Philadelphia lines were consolidated into the Pennsylvania Railroad and their tracks joined at the bayfront. In 1882, the New York, Chicago and St. Louis Railroad (i.e. the Nickle Plate) was completed through Erie south of the coastal zone. Communities such as Girard and North



East benefited as well as the City of Erie from railroad traffic. The railroads connected these communities with major markets (such as New York, Philadelphia, Chicago, etc.). Railway lines to the bayfront of Erie served a similar function. Consequently, industrial/commercial development within the communities of the coastal zone increased.

3.1.3.3 Economic Development, 1850-1900

By 1890, metalworking had become the backbone of Erie's industrial economy with 49 percent of the City's workers involved in the manufacturing of iron and brass products. Toward the end of the nineteenth century, Erie claimed the title of the world's engine and boiler capital. Many of these industries were established close to the railroad tracks.

Despite the growing importance of the foundry industry, Erie's economy in the second half of the nineteenth century was quite diversified. Briefly, Erie boasted the distinction of being the oil refining center of the world. Soon after the first oil well was drilled in 1859 near Titusville, Pennsylvania, refineries sprang up in Erie, many of them along Mill Creek. Although the intensity of the refining effort was short-lived, Erie's iron foundries and engine and boiler works continued to supply oil drillers with equipment for some time to come (Beers 1865; Miller 1909; Miller 1974).

Further diversity was demonstrated by Erie's extensive brewing industry (Whitman 1896; Miller 1909). Pipe organ companies were also



established at this time (Kane 1979). Just before the nineteenth century ended, the Hammermill Paper Company was founded along the bayfront. It eventually became the second largest employer in the Erie area (Federal Writers Project 1938).

The bayfront experienced a transformation during the second half of the nineteenth century. Both the Philadelphia and Erie and Pittsburgh and Erie Railroads erected docking facilities, freight warehouses, and other related structures at the bayfront. The Erie and Western Transportation Company, commonly known as the "Anchor Line," built three large grain elevators and several other warehouses on forty acres of dock property. Docking facilities for coal were developed by the Carnegie Company, the W.L. Scott Company, among others. Erie's harbor became an important link between the iron ore ranges of northern Michigan and Minnesota and the steel mills of Pittsburgh. Commercial fishing became an industry of some consequence as a number of fishing companies built structures at the bayfront. By the end of the century, Erie fishermen were taking the largest catches on the lake (Whitman 1896).

Communities, other than Erie, in or near the coastal zone such as North East, Girard, Fairview, East and West Springfield, exhibited a similar level of diversity in industrial activity. Aside from lumber and grist mills, industrial development included paper mills, woolen mills, breweries, cider and vinegar mills, tanneries, pump factories, pipe organ factories, creameries, brickyards, canning



works, copper works, novelty companies, cheese factories, tile works, a wrench factory, agricultural implement factories, gasoline engine manufacturing, electric generator factories, among many others.

Manufacturing was not the only area to undergo development within the coastal zone communities. Business, districts expanded to include a great variety of stores and new hotels. Existing commercial banking operations expanded while new ones started. A number of newspapers were published, among other developments.

Outside the organized communities, the coastal zone remained essentially agricultural. In 1857, in the eastern part of the coastal zone experiments in grape growing were initiated whose eventual success transformed the area into a major grape growing area. Grapes were shipped as far as Seattle and Europe from North East and Harborcreek (Miller 1909).

3.1.3.4 Population Trends, 1850-1900

The largest amount of population growth occured within the City of Erie, from a borough of 5,858 people to a city of 52,733. Polish, Slovak and Italian immigrants began to make their appearance within the coastal zone. As the population increased, existing church congregations expanded and new ones were organized. Hospitals were organized. A public school system was established in addition to private schools. A number of fine private academies flourished throughout the coastal zone (e.g. three academies in North and East Springfield). The most extravagant of these academies was the Lake



Shore Seminary in North East. It was opened by the Methodist Episcopal Church in 1869. It was sold in 1881 to the Redemptorist Fathers to be used for training young priests and renamed Saint Mary's College.

3.1.4 Settlement Patterns, 1900-1950

3.1.4.1 Political Developments, 1900-1950

In 1913, Commonwealth legislation was passed which required all third-class cities in the Commonwealth, such as Erie, to adopt a city ordinance. Thus, Erie was forced to abandon the Mayor-Council form of government which it had since 1851 in favor of a twentieth century innovation in municipal management. This new form of government did not so much reflect Erie's population growth—the community had 66,626 people in 1910—as it did a trend in the United States at that time to make municipal government more streamlined and efficient. In 1961, after forty—seven years of the City Commission form of government, Erie returned to the Mayor-Council system (Garvey 1973).

Lake City (formerly North Girard) was incorporated in 1925.

3.1.4.2 Transportation Trends, 1900-1950

The major transportation innovations of the first half of the twentieth century were land vehicles propelled by internal combustion engines—such as automobiles, buses and trucks—and the airplane. The increase in the use of privately owned automobiles and gasoline engine street buses gradually led to the demise of the electric trolley in Erie as in the nation as a whole. In December, 1925, the first gasoline engine buses began operation on Erie streets. A decade



later, in May, 1935, the electric street car system was discontinued in Erie. Long-distance trucks and buses, powered by internal combustion engines and the airplane gradually contributed to the decline of railroads in the coastal zone and in the nation as a whole.

In 1937, the City of Erie, with financial assistance from the Federal Works Progress Administration (WPA), completed Port Erie, the original name for Erie's municipal airport, west of the city limits on Twelfth Street. Until 1951, the facility was operated by the Port Erie Corporation (Federal Writers Project 1938; Gortzinger 1975; Spencer 1962).

3.1.4.3 Economic Developments, 1900-1950

The communities within the Lake Eric Coastal Zone of Eric County, as was true of the nation as a whole, were affected economically during the first half century of the 1900's by four major events:

(1) World War I, (2) the prosperity boom of the 1920's, (3) the Great Depression of the 1930's, and (4) World War II. Yet through it all, the economy maintained the diversity so characteristic of these communities in the nineteenth century.

During the twentieth century, Erie's economy increasingly depended upon the production of heavy or durable goods. Iron foundries, machine shops, and engine and boiler factories continued to employ a substantial proportion of the Erie work force. In 1910, 40 percent of Erie's eleven thousand workers were employed in the city's iron foundries and machine shops (Jones 1972). Throughout the period,



this figure remained fairly constant, although it had dropped to around 32 percent by 1940. Erie became an important manufacturer of power shovels and cranes in the twentieth century. The Bucyrus-Erie Company plant at Twelfth and Cranberry Streets became a leading producer of these items (Federal Writers Project 1938).

In 1909, the General Electric Company of Schenectady, New York built its first plant in Erie. When the company expanded its facilities in 1913, it was not in the city of Erie, however, but was outside the city limits to the east of Erie. In fact, a new political subdivision, Larwence Park Township, was created to accommodate the hugh G.E. facility. General Electric produced refrigeration units in the Erie area until the 1950's, but increasingly began to concentrate its efforts on the manufacture of electric and diesel locomotives. In time, General Electric became far and away the largest employer of Erie area people (Spencer 1962).

The docks continued to provide employment for Erie people but never achieved the potential in the twentieth century that was expected. During the period 1890 to 1930, Erie became the largest fresh water commercial fishing port in the world (Federal Writers Project 1938; Wellejus 1980).

Agricultural effort, especially in the form of grape vineyards and orchards, continued to develop especially in the eastern portion of the coastal zone. Grape cooperatives, such as the Keystone Cooperative Grape Association, had their roots in earlier cooperative



efforts. Fruit and vegetable processing companies, such as Welch's in North East, became important employers in the area.

In the west part of the coastal zone, Lake City and Girard actualized plans for controlled industrial complexes.

3.1.4.4 Population Trends, 1900-1950

During the first half of the twentiety century, the City of Erie passed the 100,000 mark in terms of population. Large influxes of immigrants, especially Poles and Italians, continued. By 1940, it was estimated that the Polish-Slovak faction made up fourteen percent of Erie's population, while Italians contributed another seven percent.

It was early in the twentieth century that Erie lost one of its natural landmarks. Mill Creek, a stream that had played such an important part in Erie's early growth and development, literally disappeared from the face of the earth. In August, 1915, Mill Creek flooded as the result of an extremely heavy rainfall. According to the event's most recent historian, twenty-nine people were killed as a consequence of the flood. After that, Erie city officials decided to encase the stream in a concrete tube to prevent such a disaster from recurring (Mehler 1979).

An important landmark in social development was the founding of colleges in the Erie metropolitan area in the twentieth century.

These include Mercyhurst College, Villa Maria College and Gannon
University. Gannon University was the largest of these. Established



in 1939 as Cathedral College, the institution was moved into the Strong Mansion at the corner of Peach and Sixth Streets in 1941. In 1944, it was chartered as Gannon College (Spencer 1962).

3.1.5 Post 1950 Development

By 1950 many of the major industries which exist today had been established and Erie had built a reputation for diversification of manufactured products. The population of Erie by 1960 reached 250,682, primarily as a result of the "post war baby boom."

During the 1960's and throughout the 1970's, the City of Erie, including the central coastal zone study area, had experienced an exodus of people from the central city to the outlying suburbs. This movement has resulted in very definite residential development patterns for the Lake Erie Coastal Zone.

In general, the central study area represents "metropolitan" characteristics with no clear distinction in municipal boundaries. The east and west study areas, unlike the central, are rural in nature. The majority of residences, industries and commercial establishments are located within borough boundaries and along major routes.

The western study area has experienced approximately a 10 percent growth in population between 1970 and 1975 and is estimated to increase approximately 51 percent by the year 2000. Population figures throughout this section are found in Table 1-1. Undoubtedly, this increase will be absorbed by the various boroughs and in newer subdivisions around these boroughs.



The rural nature of the western study area is a result of the agrarian economy. The majority of the land (about 80 percent of the total land in the western study area) is devoted to fruit and vegetable farming and/or undeveloped land. A considerable amount of land has been removed from agricultural use to accommodate future developments such as the proposed U.S. Steel plant complex on the lakeshore in Springfield Township (i.e. over 4,000 acres). The Pennsylvania Electric Company has planned development of 550 acres on the Lake Erie Coast on the Springfield/Girard border (Claridge 1979). The Coastal Zone Management program has identified these areas as Development Opportunity Areas. If one or both of these developments ever become a reality, the rural character of the western study area will be greatly altered.

Like residential development, large industrial development has concentrated in the boroughs or along U.S. 20 and Route 5. The largest of these firms is Copes-Vulcan Company which employs approximately 700.

The eastern study area is very similar to the western study area in development patterns. It too is primarily an agricultural region producing fruits and vegetables. This area is well known as one of the top grape producing areas of the country. The grapes are used in making wine and juices. Welch Foods, Inc. has a processing plant located in North East Borough which employes approximately 300.

Unlike the western study area, the future outlook of the eastern study area seems as though it will stay rural in nature. Population



projectionists estimate this area will grow by 17 percent by the year 2000, a much slower rate.

The central study area, which includes Millcreek Township,
Presque Isle State Park, Erie City and Lawrence Park Township, is
entirely urban in nature. There has not been much development since
the 1960's with only a .02 percent population increase between 1970
and 1975.

Residential development is the dominant land use in the central study area. Older housing stock is located within the city while newer suburban-type homes are found in the outlying municipality of Millcreek.

Included in the area are the two largest industrial firms in the entire Lake Erie Coastal Zone - General Electric Company and Hammermill Paper Company. Although the recession has hurt both these companies, it seems probable both will survive the current times and once again be major employers in the area. The coastal zone within the City of Erie is occupied by activities associated with lake transport of raw materials and finished goods. The Erie International Marine Terminal is the principal shipping and docking terminal. Shipbuilding, which was once an important bayfront activity, is practically non-existent. Indeed, the Port of Erie is not currently being used to capacity.

The City of Erie has been the hardest hit of all the municipalities within the coastal zone by the current economic times, but new hope has



come from civic and governmental leaders who have begun efforts to revitalize and redevelop the City. Of prime concern are the bayfront and State Street areas. The Erie-Western Pennsylvania Port Authority has initiated a study to examine the market potential of the bayfront and port. From this report, specific industrial development and recreational plans are being drawn.

The stagnation of commercial growth in the central business district, is being reversed by the City of Erie. A specific strategy of downtown revitalization is underway with the construction of the Erie Civic and Convention Center, along with encouragement to convert existing, but empty, complexes to new uses. The Erie Insurance Exchange has expanded their facilities and are actively involved in the lower east side redevelopment. Upon approval and construction of the Bayfront-Port Access Road, access to the central coastal zone study area will be improved and activate the development pace of the bayfront and downtown areas.



3.2 Summary and Evaluation of Previous Historical Surveys

A number of historical and architectural surveys have been conducted in Erie County, Pennsylvania since the 1930's which included the coastal zone study area. These include the Historic American Buildings Survey (1941), the Frontier Fort and Trails Survey (1930's), Erie County Historical and Architectural Preservation Plan (Erie County Metropolitan Planning commission 1976), Wolynec's "paper" survey (1977) of Erie and Crawford Counties for a section of the U.S. Steel Environmental Impact Statement (Little 1978), the Urban Development Action Grant Survey (Heidt, Evans, Salata 1979), Historic Resources Survey - West Erie County (Claridge 1979), The Coastal Zone Development Plan for the West Bay Front Area of the City of Erie (Becht 1981), Historic Sites Survey, City of Erie, Pennsylvania (Wolynec 1982) and Cultural Resource Management Study for Bayfront-Port Access Road Project Legislative Route 1003, Section A00, Erie, Pennsylvania (Claridge 1982).

Private survey efforts include the late Erie architect Robert Krider's unpublished bicentennial survey of architectural sites, survey efforts undertaken by Preservation Project, Inc., and a variety of researches undertaken by the Erie County Historical Society. A brief summary of selected survey efforts follows below with an emphasis upon researches undertaken in the past ten years.

The Erie County Historical and Architectural Preservation Plan (1976) was intended for use as a preservation planning document by



municipalities within Erie County. The document included an inventory of sites located throughout Erie County. The site selection process involved no direct survey effort. Sites which Mr. Krider and members of the Erie County Historical Society identified as significant were included in the inventory.

This document, along with site data available at the Office of Policy Planning and Management, City of Erie, formed the core of the Coastal Zone Development Plan for the West Bay Front Area of the City of Erie (Becht 1981) historic site evaluation. No survey, independent of existing inventories, was undertaken for this plan. The purpose of the effort was to identify historical and architectural sites which would be potentially impacted by redevelopment of the west bayfront area.

The Wolynec (1977) "paper" survey was undertaken as part of the evaluation of the secondary impact area associated with the proposed development of the U.S. Steel plant in Conneaut, Ohio. The survey was actually a compilation of already existing inventories including the Pennsylvania Historical and Museum Commission inventory and the County inventory (1979). There was no survey done to identify new resources. The survey contributed information which was important to the section on impacted cultural resources in the U.S. Steel Environmental Impact Statement (Little 1978).

The West Erie County Historic Sites Survey (Claridge 1979) was undertaken by the Erie County Historical Society for the Erie County



Department of Recreation and Cultural Affairs. The survey was undertaken following guidelines set forth by the Pennsylvania Historical Survey. Certain sites identified during this survey, and placed on the Pennsylvania Historic Resource Survey, are located within the Lake Erie Coastal Zone. These will be included in this document.

The Urban Development Action Grant Survey was directed by architect Herbert Heidt (Heidt, Evans, Salata 1979) in the east bayfront area. The survey was done as a requirement of the Urban Development Action Grant. Actual physical inspection of buildings in the area by architects Heidt and Krider was undertaken as was an examination of existing inventories. The purpose of the effort was to identify historical and architectural sites worthy of preservation consideration.

The Cultural Resource Management Study for Bayfront-Port Access
Road Project Legislative Route 1003, Section A00 Erie, Pennsylvania
was prepared for Power Allen and Associates by John Claridge of the
Erie County Historical Society (1982). This study focused upon
identifying known historical and archaeological sites which would
potentially be impacted by the proposed highway project. Since these
sites are found within the Lake Erie Coastal Zone, they will be included in this report.

The City of Erie Historic Sites Survey, conducted by the North-west Institute of Research (Wolynec 1982) was funded by the City of Erie, Office of Policy Planning and Management and supervised by



Pennsylvania Bureau of Historic Preservation. The survey was undertaken within the inner city area of the City of Erie, following guidelines set forth by the Pennsylvania Historic Resource Survey. The survey was intended to provide the City of Erie, Office of Policy Planning and Management with data concerning potential historically and architecturally significant sites. Sites identified during this survey, and placed on the Pennsylvania Historic Resource Survey, are located within the Lake Erie Coastal Zone. These will be included in this report.

Probably the best known private survey effort is architect Robert Krider's county-wide bicentennial survey. He, along with a number of volunteers, most notably Mrs. Andrews of the Erie County Historical Society, identified close to 400 architecturally significant sites built prior to 1865 in Erie County. Of this number, less than a dozen were identified within the City of Erie because the survey emphasized County sites. Mr. Krider's data has been accessed on a number of occasions by other survey or inventorying efforts (as indicated above).

The newest and perhaps the most important private organization to be involved in preservation-related activities is Preservation Project, Inc.

The purpose of this organization is not to discover new sites, as such, but to focus efforts towards preservation of known sites. To this end, since its incorporation in 1980, members have successfully



applied themselves to the research and effort necessary to place buildings and districts on the National Register of Historic Places. Recently, the organization was given a \$15,000 grant from the Pennsylvania Division of Coastal Zone Management to do an architectural and engineering study of the Modern Tool Building in the City of Erie. This study will explore the feasibility of renovating the building for modern use while preserving its basic integrity. Preservation Project published its first book in January of 1982 as part of their effort to educate the public about historic preservation. Twenty-four architecturally significant buildings located throughout the County were highlighted. Succeeding books will detail other sites with a variety of areas and themes the focus of interest.

The Erie County Historical Society has no official survey program sponsored by the Society according to Mr. John Claridge, the Director of the Society. Nevertheless, the Society and its members have made important contributions to other survey and inventorying efforts.

For example, members of the Society worked with Mr. Krider on the county-wide bicentennial survey (notably Mrs. Andrews). Mr. Claridge assisted architects Heidt and Krider in gathering survey information for the Urban Development Action Grant Survey. Recently, the Society was involved in an environmental impact study of a portion of the bayfront redevelopment area. In 1979, the Historical Society undertook the survey of the western portion of the County under the auspices of the County government and the Pennsylvania Historical and Museum



Commission, Bureau of Historic Preservation. The Society has become a repository of site information because of its position as an important source of archival information. Organizations and individuals requiring research information on certain buildings, including deeds and records searches, often go to the Society for assistance.

With two relevant exceptions, the studies briefly mentioned above were inventories of already known sites and not actual survey efforts. Both the West County Historic Sites Survey (Claridge 1979) and the City of Erie Historic Sites Survey (Wolynec 1982) were survey efforts following guidelines established by the Pennsylvania Historic Resource Survey. Both survey efforts were approved by the Pennsylvania Historical and Museum Commission. These surveys together overlap the west and central portions of the coastal zone study area in Erie County. The remaining east third of the coastal zone had not been studied by any Pennsylvania Historical and Museum Commission—sanctioned survey effort.



3.3 <u>Methodology: Conducting the Historic Survey in the Eastern</u> Portion of the Coastal Zone

3.3.1 Resources Selected

A historic site survey of the remaining unsurveyed east third of the coastal zone study area was undertaken for this report. This survey effort complied with the <u>Specifications and Requirements of the Pennsylvania Historic Resource Survey and Comprehensive Statewide Historic Sites Survey Program</u>. The following basic steps were taken to complete the survey:

- A "windshield survey" was conducted of every street and road to identify structures of "noteworthy" architectural, structural, material, and construction characteristics (among possible others) without prejudice against recent (within 50 years) construction.
- Sources of additional information were accessed such as historical documents, maps, etc. (The reader is referred to Section 1.6 for a complete list of sources which were accessed.)

During the site selection process, which consisted primarily of a windshield survey, the following resources were selected: buildings, sites, objects, structures, and districts. Table 3-1 defines each of these resource categories. (These resources and definitions are recommended by the National Register of Historic Places in <u>Guidelines</u> for Local Surveys: A Basis for Preservation Planning (Derry et al. 1977).

Table 3-2 lists the themes covered by this survey and examples of each theme. (These themes are listed in <u>Comprehensive Statewide</u>

<u>Historic Sites Survey Program and Guidelines</u> (no date; see Appendix C for a copy of these guidelines).

3-32

Table 3-1 Types and definitions of historic resources (from Derry et al. 1977: 22-23).

EXAMPLES OF CATEGORY	1. Notable examples of architectural styles and periods or methods of construction, particularly local or regional types.	2. Buildings showing the history and development of such diverse areas as communications. community planning, government, conservation, economics, education, literature, music, and landscape architecture.	 Stores and businesses and other properties that provide a physical record of the experience of particular ethnic groups. 	4. Markets and commercial structures of blocks.	5. Buildings by great architects or master builders and important works by minor ones.	6. Architectural curiosities, one-of-a-kind buildings.	7. Sole or rare survivors of an important architectural type or types.	8. Studios of American artists, writers, or musicians during years of significant activity.	9. Institutions that provide evidence of the cultural history of a community (churches, universities, art centers, theaters, and entertainment halls).
HISTORIC RESOURCE CATEGORY	Building								

Table 3-1 (Continued)

HISTORIC RESOURCE CATEGORY	EXAMPLES OF CATEGORY
Building (continued)	10. Places where significant technological advances or inventions in any field occurred (agricultural experiment stations, laboratories, etc.).
Site	1. Archaeological sites containing information of known or potential value in answering scientific research questions.
	 Archaeological sites containing information that may shed light on local, state, or national history.
	3. Sites of cultural importance to local people or social or ethnic groups, such as locations of important events in their history, historic or prehistoric cemeteries, or shrines.
	4. Sites associated with events important in the history of the community as a whole (battle-fields, trails, etc.)
Object	1. Objects important to the cultural life of a community and related to a specific location (totem poles, fountains, road markers, outdoor sculpture, etc.)
	 Objects important to scientific, historical, or art historical research (petroglyph boulders, bedrock mortars, statuary, ships, railroad engines, etc.)

Table 3-1 (Continued)

HISTORIC RESOURCE CATEGORY	EXAMPLES OF CATECORY
Structure	1. Industrial and engineering structures, including mills, kilns, quarries, aquaducts, weirs, processing plants, utility or pumping stations, dams.
	 Transportation structures, including railroads, turnpikes, canals, tunnels, bridges, roadhouses, lighthouses, wharves.
District	1. Groups of buildings that physically comprise a specific environment: groups of related buildings that represent the standards and tastes of a community or neighborhood during one period of
	history, unrelated structures that represent a progression of various styles and functions, or cohesive townscapes or streetscapes that possess an identity of place.
	2. Groups of buildings, structures, and/or sites representative of or associated with a particular social, ethnic, or economic group during a particular lar period.
	3. Agricultural areas or related farm structures (silos, barns, granaries, trrigation canals).
	4. Groups of structures that show the industrial or technological developments of the community, state or nation.
	5. Groups of buildings representing historical development patterns (commercial and trade centers, county seats, mill towns).

Table 3-1 (Continued)

EXAMPLES OF CATEGORY	6. Groups of sites, structures, and/or buildings containing archaeological data and probably representing an historic or prehistoric settlement system or pattern or related activities.	7. Groups of educational buildings (schools, universities).	
HISTORIC RESOURCE CATEGORY	District (continued)		

Table 3-2 Major themes and types of historic resources (from Comprehensive Historic Site Survey Program and Guidelines, n.d., PHMC-OHP).

THEMES	TYPES OF HISTORIC SITES
Archaeology	Indian sites
Agriculture	Farms, barns, smokehouses, out- buildings
Architecture	Buildings by known architects, buildings of exceptional archi- tectural merit.
Art	Sculptures, structures associated with artists, etc.
Commerce and Transportation	Office buildings, warehouses, markets, hotels, railroads, stations.
Conservation	Watersheds, parks, gardens
Education	Schools, museums, libraries, universities
Exploration and Settlement	Early forts, land surveys, structures associated with early settlement and development
Industry	Mills, furnaces, factories, foundaries
Military	Arsenals, armories, forts, battle sites
Politics	Government related buildings: city halls, courthouses, municipal centers
Religion	Churches, meetinghouses, synagogues
Science	Medical buildings: hospitals, clinics, laboratories
Society and Social Conscience	Utopian communities, lodges
Technology	Bridges, dams, tunnels
Urban Planning	Planned areas, parks, districts



Of these themes, the following were especially evident during the survey: architecture, commerce, transportation, agriculture, education, exploration and settlement, industry, military, politics, religion and technology. The "windshield survey," in particular, identified architecturally significant sites. Architecture was used as an aid to judging age or function. The architectural style book which was used in the survey was <u>Identifying American Architecture</u>:

A Pictorial Guide to Styles and Terms, 1600-1945, by John J.G. Blumenson (1977).

Cultural resources 50 years and older were selected. This is in conformance with the cut-off date for National Register inclusion (Derry et al. 1977:41). However, certain younger sites were selected which would meet the time requirement within the next ten years or whose inclusion could be strongly justified.

The guide to determining whether a site, etc. should be selected or not was the criteria for inclusion in the National Register of Historic Places. The following summary of eligibility is taken directly from Derry et al. (1977:8):

National Register Criteria for Evaluation

The following criteria are designed to guide the States, Federal agencies, and the Secretary of the Interior in evaluating potential entries (other than areas of the National Park System and National Historic Landmarks) for the National Register:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:



- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will quality if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- B. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- C. a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life: or
- D. a cemetery that derives its primary significance from graves of persons or transcendent importance, from age, from distinctive design features, or from association with historic events; or
- E. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or



- F. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- G. a property achieving significance within the past 50 years if it is of exceptional importance.

Once sites were selected for the inventory, specific data about each resource were entered upon Pennsylvania Historic Resource Survey Forms. Appendix A contains these forms and others compiled from previously mentioned surveys along with a key to the code used to characterize each resource and maps locating each resource (Figures A-2 through A-7. A photographic record compiled during the survey effort is on file with the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation.



3.4 Results: Historic Resources Inventoried

More than 494 sites and three potential districts were compiled from existing inventories and the windshield survey. Altogether, they represent a comprehensive historical inventory of the coastal zone study area. These include 8 sites on the National Register of Historic Places, 26 sites inventoried during the West Erie County Survey (Claridge 1979), 241 sites inventoried during the City of Erie Survey (Wolynec 1982) and 227 sites inventoried from the east county area by this survey effort.

A number of the sites in the inventory are listed on the Pennsylvania Inventory of Historic Places, Historic American Buildings

Survey (HABS) or the Historic American Engineering Records (HAER).

Figures A-2 through A-7 show the locations of all sites (historic and archaeological) presented for this inventory. Appendix A documents each site.

3.4.1 Potential Historic Districts

Three potential historic districts were inventoried within the coastal zone. Two of these, the lower State Street business district and the West 6th Street residential district, are located in the City of Erie. The third is the downtown business district in North East Borough.

The proposed lower State Street district in Erie represents a functional and temporal unit (with some exceptions). It is primarily



a commercial area ranging in time from the early 19th century to the early 20 century with some more modern buildings included. It is important to note that many of the buildings within the proposed district are either on or already determined to be eligible for the National Register of Historic Places.

The recommended West 6th Street district, between Perry Square and Gridley Park, represents Erie's version of "Millionaire's Row." Aside from the architectural variety and integrity of its residences, this recommended district is rich in the history of people who were "prime movers" in Erie's development. With very few exceptions, little demolition has occurred and consequently the street is mostly intact. A number of residences have already been placed on the National Register of Historic Places.

The proposed downtown district in North East represents a concentration of buildings representing late 19th and early 20th century commercial development in the borough. Aside from their commercial importance, a number of the buildings within the downtown area represent architecturally unique buildings worthy of note and preservation in their own right. Each potential district is discussed more specifically in succeeding sections. Figures A-5 and A-7 show suggested boundaries of these proposed districts.

3.4.2 Evaluation of Historical Context

Obviously, historic resources were not created in a vacuum. They were part of a larger pattern of local and national events which



effected aspects of the human-built environment. Therefore, an assessment was made of the place of historic resources, located within the Lake Erie Coastal Zone in Erie County, Pennsylvania in the pattern of county and national development, as reflected in patterns of style, function, distribution, ownership, etc. of its structures and as reflected in changes in settlement pattern. Section 3.1 was meant to be a backdrop against which the significance of historic resources could be appreciated.

Upon thorough examination of the historical background of the coastal zone study area and the inventory of sites representing its historically and architecturally built environment, a number of organizational units for presenting the data were apparent. These organizational units follow those used in the The Resource Protection Plan: A Framework for Decision Making in Protecting the Cultural Resources of the Pennsylvania/Delaware River Coastal Zone (Cee Jay Frederick Associates with John Milner Associates 1981) as recommended by the Pennsylvania Historical and Museum Commission. These are Mercantilism/Commerce, Agriculture, Private Institutions, Public Institutions, Public Accommodations, Transportation, Industry, and Residences. Each of these organizational units can be organized into temporally distinct units representing the five major episodes of development in the coastal zone as discussed in the section on historic background: before 1800, 1800-1850, 1850-1900, 1900-1950 and post 1950.



3.4.3 Mercantilism/Commerce

3.4.3.1 Resources Inventoried

Mercantilism and commerce became important to the development of the coastal zone after 1800. Commercial activities tended to be concentrated within urban communities and increased in importance with the development of the Erie Canal, the railroads, and the harbor of the City of Erie. Resources found within this organizational unit include banks, a customs house, stores, taverns, newspapers, warehouses/garages, offices and grain elevators.

Four resources were inventoried for the 1800-1850 period. Of these, the Old Customs House in the City of Erie (049-ER-Z2-1002-211) (Figure 3-la), originally a branch of the U.S. Bank of Pennsylvania (built in 1839), is on the National Register of Historic Places. Both it and the Bonnell Block (049-ER-Z2-1002-215) (Figure 3-lb) nearby are part of the proposed lower State Street commercial district discussed previously.

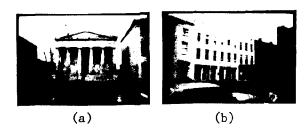


Figure 3-1. The Old Customs House (a) in the City of Erie, originally a branch of the U.S. Bank of Pennsylvania (c. 1839) and the Bonnell Block (b) are located within the proposed lower State Street district.



Over 30 resources were inventoried for the 1850-1900 temporal unit. (A more precise number is difficult since some resources were grouped as one resource.) The majority of these commercial structures are located within the proposed lower State Street district in the City of Erie and in the proposed downtown business district in the Borough of North East. The latter, in particular, contains examples of late 19th century commercial architecture which are unique both in their architectural expression and high integrity (Figure 3-2).



Figure 3-2. This Victorian Eclectic commercial row in North East Borough is located in the proposed downtown commercial district.

Twelve resources were inventoried for the 1900-1950 temporal unit. One additional building was built in 1956 (The Erie Insurance Exchange) (049-ER-Z2-1005-134). A small number of these are located within the two districts previously discussed.

Table 3-3 presents a thematic breakdown of resources included in this unit.

3.4.3.2 Status, Recognition, Protection, Districts and Conclusions

Resources within the mercantilism/commerce organizational unit have long been recognized as important both locally and by the Pennsylvania



THEMATIC BREAKDOWN:

MERCANTILISM AND COMMERCE

		Total Number
1.	SURVEY UNITS	53
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 . 3 34 21 1
3.	CLASSIFICATION Site Structure Object Building N.R. Undetermined	1 2 0 48 0 2
4.	*STYLE, DESIGN, FOLK TYPE Commercial Commercial False Front Victorian Commercial 19th Century Commercial Row Victorian Row Commercial Late Victorian Victorian Industrial Victorian Commercial with Romanesque Decoration 19th Century Commercial	7 4 5 1 1 1 1 2
	Greek Revival Vernacular Vernacular Commercial Victorian Eclectic Victorian Eclectic Commercial Row Federal Victorian Romanesque Neo-Classicism Italianate Undetermined Italianate-Commercial	1 3 3 1 1 1 1 1 1 10 5



Table 3-3 (continued)

THEMATIC BREAKDOWN: MERCANTILISM AND COMMERCE (continued)

5.	*FUNCTION	
	Original and/or Present Use	
	Commercial	43
	Commercial Row	1
	Single Family	3
	Multi-Family	4
	Two Family	3
	Club	1
	Bank	1
	Miscellaneous Non-residential	2
	Apartment	1
	Vacant	1
	Undetermined	2

^{*}Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



Historical and Museum Commission. Table 3-4 lists those resources which are currently on the National Register of Historic Places, which have been determined eligible for the Register by the Pennsylvania Historical and Museum Commission, and which have been singled out by this or other studies as deserving more research for possible determination of eligibility. Each of the two proposed districts have been inspected by Pennsylvania Historical and Museum Commission representatives and determination of their eligibility for district status is pending. The City of Erie, Office of Policy Planning and Management has targeted the lower State Street area for intensive redevelopment efforts. Wherever possible, they are attempting to encourage preservation and restoration of the buildings within the area as part of this effort. The area has been in a steady decline in recent years and has had limited importance as a contemporary commercial area. Conditions of some buildings in this area have deteriorated due to neglect, vandalism, fire, etc. (Figure 3-3a). Some exceptions include the Customs House which is owned by the Pennsylvania Historical and Museum Commission and is occupied by the Erie County Historical Society. Current interest in the area by developers and entrepreneurs suggests a possible renaissance for the area for contemporary purposes but maintaining or regaining historical integrity (Figure 3-3b). Confirmation of this area as an Historic District could encourage and indeed hasten this renaissance.



Table 3-4

RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

MERCANTILISM AND COMMERCE

Historic or Common Name	Address	Survey Code
Joseph Sterret House	414-416 State St. Erie	049-ER-Z1-4002-202
Old Customs House*	State St. between 4th and 5th Erie	049-ER-Z2-1002-211
Patterson Store	Old Lake Road at Holliday Road Springfield Twp.	049-39-3-1-50
Bonnell Block **	419-423 State St. Erie	049-ER-Z2-1002-215
(Business Bldg.)**	425-431 State St. Erie	049-ER-Z2-1002-217
	20 Wall Street North East Boro	049-NE(35)-7-48-10
	21 South Pearl St. North East Boro	049-NE(35)-7-48-2
St. George's Tavern/ General Store	2 Wall Street North East Boro	049-NE(35)-7-48-6
	8-12 Wall Street North East Boro	049-NE(25)-7-48-8
North East Breeze Publishing Company	35-37 S. Lake St. North East Boro	049-NE(35)-5-28-6,7
	23 S. Lake St. North East Boro	049-NE(35)-5-28-1

^{**} On National Register

Eligibility for National Register determined by PHMC



Table 3-4 (continued)

Historic or Common Name	Address	Survey Code
	25 S. Lake St. North East Boro	049-NE(35)-5-28-2
	1-9, 15-19 W. Main North East Boro	049-NE(35)-5-29-2 thru 8
	S. Lake St. North East Boro	049-ER (35)-5-28-3
Prozan Furniture and Upholstery	13-15 E. 5th St. Erie	049-ER-Z2-1002-101
F. Schneider House/ Store**	3 E. 4th St. and 401 STate St. Erie	049-ER-Z2-1002-209
	6-16 S. Lake St. North East Boro	049-NE(36)-5-31-14
Webb Block	17-21 E. Main St. North East Boro	049-NE(36)-5-31-4
	19 W. 4th St. Erie	049-ER-Z1-4002-207
	11, 13-15 E. Main North East Boro	049-NE(36)-5-31-2 049-NE(36)-5-31-3
	18-20 and 24-28 S. Lake St. North East Boro	049-NE(36)-5-31-13 and 13.01
	402-210 State St. Erie	049-ER-21-4002-204
First National Bank	17-19 S. Lake St. North East Boro	049-NE(35)-5-28-1.01
	418-420 State St. Erie	049-ER-Z1-4002-201
Boston Store Garage	422-24 French St. Erie	049-ER-Z2-1002-202



Table 3-4 (continued)

Historic or Common Name	Address	Survey Code
	101 E. 5th St. Erie	049-ER-Z2-1004-217
Grain Elevator	East Bay Front	Unknown
North Park Row (Business Block #1)	Perry Square Erie	049-ER-Z1-4002-100 -101 -103 -104 -105 -106 -107 -108 -109 -110 -111



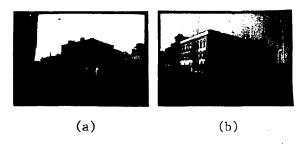


Figure 3-3. The condition of some buildings such as (a) former F. Schneider Store in the proposed lower State Street district in Erie are poor; (b) nearby, North Park Row is undergoing extensive renovation.

The commercial buildings within the proposed North East Borough business district (with a few exceptions) have maintained their functional and architectural integrity through the years. They have not suffered from neglect and abandonment to the extent that other business districts within the coastal zone have. Historic District status would encourage further improvements or maintenance of the good conditions and excellent integrity of the buildings in the area.

3.4.4 Agriculture

3.4.4.1 Resources Inventoried

an important occupation within the coastal zone study area. By the end of the 19th century, subsistence farming had been replaced to some extent by specialization in orchards and vineyards. Although farm-houses are still abundant throughout the coastal zone, those that were inventoried either from other surveys or the windshield survey have been organized into the organizational unit of residences. Often their importance is not so much that they are farmhouses, but that they were



the residences of persons important to the development of the area.

Resources which were included in the agricultural organizational unit are farmhouses and special and multipurpose barns.

Eight sets of resources were inventoried for this unit. All of these were built after 1840 and most before 1910. One exceptional set (049-37-17-39-3) consists of an Italianate farmhouse (built in 1840), a brick octagonal barn (built in 1879) and a frame house (built in 1890). These are located in North East Township. The barn is the only Octagon Barn in Erie County. This unique building reflects the German influence on the North East area. Its style and appearance are similar to buildings of this type seen in Lancaster, Pennsylvania (Figure 3-4).



Figure 3-4. The Octagon Barn (c. 1840) reflects the German influence in the North East area.

Table 3-5 presents a thematic breakdown of resources included in this unit.

3.4.4.2 Status, Recognition, Protection and Conclusions

No resources from this unit are on the National Register nor have any been recommended for consideration for inclusion, to date. With one exception, The Swan Family Barn in Fairview Township (049-21-28-17-6),



THEMATIC BREAKDOWN:

AGRICULTURE

		Total Number
1.	SURVEY UNITS	8
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 2 6 4 0
3.	CLASSIFICATION Site Structure Object Building N.R.	0 0 0 8 0
4.	*STYLE, DESIGN, FOLK TYPE	
	Italiante Octagon Vernacular Shingle Victorian Eclectic Victorian 19th Century Utilitarian	1 3 1 1 1 2
5.	*FUNCTION Original and/or Present Use	
	Single family Two family Barn Non-residential	5 1 1 3

^{*}Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



all resources were discovered during the windshield survey. Two sets of properties should be considered for evaluation of inclusion in the National Register: The Octagon Barn and House (049-37-17-39-3) and Mead Farms (049-37-17-39-9). Both are good examples of prosperous farm complexes during the middle and latter half of the 19th century. Each is in good condition and maintains reasonably good integrity. Interestingly, each is located on Middle Road in North East Township, within a short distance of the other. A third complex on the road, the Orton House and Barn, consisting of an excellent example of a Victorian Eclectic home and a modern barn, has not been included because the dates of construction of the complex are in question (049-37-5-45-7). If this problem is cleared up, this third complex might be added to the list for consideration. Table 3-6 tabulates these recommendations.

3.4.5 Private Institutions

3.4.5.1 Resources Inventoried

Private Institutions were and continue to be important foci for community development and social life within the coastal zone. Churches, schools, and social clubs in particular were important to the development of a sense of social and spiritual fellowship since the 1800's. Resources inventoried within this unit include churches, private schools, orphanages, children's homes (problem children), hospitals, fraternal societies and an opera house annex.



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

AGRICULTURE

Historic or Common Name	Address	Survey Code
Octagon Barn and Farm	11441 E. Middle Rd. North East Twp.	049-37-17-39-3
Mead Farms	11725 Middle Rd. North East Twp.	049-37-17-39-9
	11309 Middle Rd. North East Twp.	049-37-5-45-7
	10262 East Lake Rd. North East Twp.	049-37-2-1-36

^{*} On National Register
Eligibility for National Register determined by PHMC



One resource, a church, was inventoried for the 1800-1850 temporal unit. Fourteen resources were inventoried for the 1850-1900 temporal unit and three for the 1950-present temporal unit. The great majority of these resources are churches. Table 3-7 presents a thematic breakdown of resources included in this unit.

3.4.5.2 Status, Recognition, Protection and Conclusions

The distribution of resources temporally is misleading. Many of the church congregations have experienced great longevity, being organized in the early 1800's. As these congregations grew, their needs grew, and early churches were razed and built anew or added on to. Therefore, if one pays attention only to the date of construction to determine significance, the point of the longevity of a particular congregation, a very important point, will be lost.

For example, the congregation of the Presbyterian Church of North East was the first organized congregation in Erie County, organized in 1801 (049-NE(35)-5-27-5). The Methodist denomination in North East Borough, based in the United Park Methodist Church (049-NE(36)-2-5-36), was organized in 1812 (Figure 3-5).



Figure 3-5. The Methodist denomination in North East Borough was organized in 1812. It is based in the United Park Methodist Church.



THEMATIC BREAKDOWN:

PRIVATE INSTITUTIONS

		Total Number
1.	SURVEY UNITS	33
2.	*SURVEY UNITS BY TIME PERIOD	
	1 (before 1800)	0
	2 (1800–1849)	2
	3 (1850–1899)	14 16
	4 (1900-1950) Undetermined	3
	undetermined	3
3.	CLASSIFICATION	
	Site	. 0
	Structure	3
	Object	0
	Building	30
	N.R.	0
4.	*STYLE, DESIGN, FOLK TYPE	
-	Vernacular	9
	Victorian Romanesque	1
	Gothic	. 7
	Richardsonian Romanesque	3
	Victorian Romanesque	1
	Victorian Industrial	1
	Victorian Gothic	3
	Victorian Vernacular	1
	Modernistic	1
	Commercial	2
	Romanesque Revival	1
	1950's Modern Commercial	1
_	Undetermined	3
5.	*FUNCTION Original and/or Present Use	
	Church	18
	Masonic Temple	-1
	Commercial	4
	Seminary	- 1
	Hospital	1
	School	7
	Single Family	. 1
	Multi family	3
	Orphanage	1
	Miscellaneous Institutional	3
	Club	1
	ecause of the fact that a site	
S	tyle, and period, total numbers	may exceed total Survey

y Units. 3-58



The Presbyterian congregation at Harborcreek was organized in 1832, based in the First Presbyterian Church of Harborcreek (049-27-34-33-110). The Episcopal Congregation of Erie was organized in 1828 and is based in St. Paul's Episcopal Cathedral (049-ER-Z1-4004-204).

Of special interest is the G.C. Church of the Nativity (049-ER-Z2-1051-108) in the City of Erie. It is one of only four churches of the Greek Old Orthodox Church ("Old Believers") in the United States, which observes the Julian calendar.

Private institutions were not limited to churches. Perhaps the most notable private school located within the coastal zone is St.

Mary's College (formerly Lakeshore Seminary) (049-37-5-21-1) in North
East Borough (Figure 3-6).



Figure 3-6. St. Mary's College, formerly the Lakeshore Seminary, in North East Borough, was originally opened by the Methodist Episcopal Church in 1869.

This complex of beautiful Gothic buildings was initially opened by the Methodist Episcopal Church in 1869. It was sold to the Redemptorist Fathers in 1881 and is used by them to this day. The condition of the complex of buildings and integrity of its Gothic architecture are excellent.



Another private institution of note, St. Joseph's Home for Children in the City of Erie (049-ER-4124-300), was established in 1864 by the Sisters of the Order of St. Joseph. It moved to its current location on West 6th Street in Eric in 1924. It was supported by the Erie Diocese of the Catholic Church, by appropriations from the Board of Commissioners of the 13 counties in the diocese and by the Erie Community Chest. It is currently an apartment building with a loss of some integrity due to remodeling (Figure 3-7).



Figure 3-7. St. Joseph Apartments on West 6th Street in the City of Erie was originally St. Joseph's Home for Children (c. 1922-23)

Hamot Hospital, organized in the late 1800's, remains an important focal point for health services within the City of Erie (049-ER-Z2-1049-100).

A final building worth noting is the annex to the Short Opera House in North East Borough (049-NE(35)-10-45-2). The opera house was torn down in 1944, but the annex building stands today as the North East Athletic Club.

The majority of buildings within this organizational unit have maintained their architectural and functional integrity with very few exceptions. Despite the social importance of many of these buildings, none have been nominated to the National Register of Historic Places



although a few have been determined to be eligible by the Pennsylvania Historical and Museum Commission. Table 3-8 lists those resources which have been determined to be eligible for the Register by the Pennsylvania Historical and Museum Commission and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility.

3.4.6 Public Institutions

3.4.6.1 Resources Inventoried

Social organization within the coastal zone was manifested in governmental responsibility as well as in the private sector. Resources representing this public sector include governmental offices, convalescent homes, firehouses, courthouses, post offices, libraries, and of course public schools. Indeed, the majority of resources consist of school buildings.

One resource, a school house, was inventoried for the 1800-1850 temporal unit. Fourteen resources were inventoried for the 1850-1900 temporal unit. Ten of these are school houses representing the movement to public education within Pennsylvania at this time period.

The Erie County Courthouse, Engine Co. No. 4, The Soldiers and Sailors Home, and the Erie County Public Library, Main Library in the City of Erie are the remaining resources in this temporal unit.

Nine resources are included in the 1900-1950 temporal unit. Of these, one is a courthouse, two are firehouses (one of these a former City Hall), one post office and one library. The remaining resources



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

PRIVATE INSTITUTIONS

Historic or Common Name	Address	Survey Code
Fairplain Methodist- Episcopal Church	Fairplain Rd. at Old Lake Road Girard Twp.	049-24-3-10-20
United Park Methodist Church	30 North Lake North East Boro	049-NE(36)-2-15-36
St. Gregory's Church	50 S. Pearl St. North East Boro	049-NE(35)-10-46-22
St. Paul's Episcopal Cathedral	133 W. 6th St. and 134 W. 7th St. Erie	049-ER-Z1-4004-204
** Josephinum	102 W. 5th St. Erie	049-ER-Z1-4005-200
Grace Episcopal Church	10121 Hall Ave. Lake City Boro	049-28-9-15-1
Annex Bldg. to Opera House	86 S. Pearl St. North East Boro	049-NE(35)-10-45-2
Episcopal Church	51-53 W. Main St. North East Boro	049-NE(35)-6-26-4
St. Mary's College/ Lakeshore Seminary	West Division St. North East Boro	049-37-5-21-1
Presbyterian Church	25 W. Main St. North East Boro	049-NE(25)-5-27-5
Hamot Hospital	201 State St. Erie	049-ER-Z2-1049-100
St. Paul's Evangelical Lutheran Church	30 Clinton St. North East Boro	049-NE(35)-6-47-14

<sup>*
**</sup> On National Register
Eligibility for National Register determined by PHMC
3-62



Table 3-8 (continued)

Historic or Common Name	Address	Survey Code
First Baptist Church	43 S. Lake St. North East Boro	049-NE(35)-5-27-7
G.C. Church of the Nativity	247 E. Front St. Erie	049-ER-Z2-1051-108
Swan School and Taylor Summer House	6390 West Lake Rd. Fairview Twp.	049-21-29-16-42.01
First United Presbyterian Church	111 W. 5th St. Erie	049-ER-Z1-4005-101
St. Joseph's Home for Children	1926 W. 6th St. Erie	049-ER-4124-300
St. Patrick's Church and Rectory	130 E. 4th St. Erie	049-ER-Z2-1006-142 and 142.01
First Presbyterian Church of Harborcreek	6722 Buffalo Road Harborcreek Twp.	049-27-34-33-110
Villa Maria Academy	2403 West Lake Rd. Millcreek Twp.	049-33-31-47-3
Masonic Temple	S. Lake St. North East Boro	049-NE(35)-5-28-3
St. Barnabas Home	12430 E. Lake Rd. North East Twp.	049-37-14-25-50



are schools, Table 3-9 presents a thematic breakdown of resources included in this unit.

3.4.6.2 Status, Recognition, Protection and Conclusions

To date, only one building from this organizational unit has been placed on the National Register of Historic Places. This building is the Erie County Public Library, Main Branch on Perry Square in the City of Erie (049-ER-Z1-1001-200). The Erie County Public Library, Main Branch is still in use as a library. However, spatial constraints are such at the library accessions may be moved (Figure 3-8).



Figure 3-8. The Main Branch of the Erie County Public Library on Perry Square in the City of Erie is on the National Register of Historic Places.

The Soldiers and Sailors Home is a public building of some note (049-ER-Z11-1025-105). Initially, in the 1860's it was a hospital for disabled sailors, on the site of the old American Fort. Part of the facility was occupied by a city-run hospital and part left unfinished until money was appropriated by the State legislature in 1885 to complete the building. The home was dedicated in 1887. Recently, the home has undergone needed structural modifications to meet modern safety and health standards.



THEMATIC BREAKDOWN:

PUBLIC INSTITUTIONS

		Total Number
1.	SURVEY UNITS	22
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 1 12 1 2
3.	CLASSIFICATION Site Structure Object Building N.R.	0 0 0 22 0
4.	*STYLE, DESIGN, FOLK TYPE Vernacular Vernacular School House Greek Commercial Victorian Eclectic Victorian Pattern Book Building Neo-Classicism Colonial Revival Undetermined Richardsonian Romanesque 1930's	7 4 2 2 1 1 2 1 1 1
5.	*FUNCTION Original and/or Present Use School Governmental Firehouse Multi family Miscellaneous Institutional Miscellaneous Non-residential Single Family Commercial Armory	13 3 1 2 4 5 3

^{*}Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



The Erie County Court House (049-ER-Z1-4005-102) was constructed in 1853 and completed in 1889-90. Recent additions include the Erie County Jail.

The building currently occupied by the Firefighters Museum in Erie, Engine Co. No. 4, is among the oldest in the City of Erie (049-ER-Z5-4014-200). The Pennsylvania Historical and Museum Commission has determined this building to be eligible for inclusion in the National Register of Historic Places (Figure 3-9).



Figure 3-9. The Firefighters Museum in the City of Erie, Engine Co. No. 4, is among the oldest in the City of Erie (c. 1873).

The fire station and town hall are significant to the history of North East Borough (049-NE(36)-5-31-6,7). A number of fires had plagued the Borough since 1884. As a consequence, a 4,000,000-gallon reservior was constructed in the hills southeast of town. Subsequently, a fire station was built in 1900 which was also used as a town hall. The building remains in use as a fire station.

It was surprising the extent to which the number of schools from the 19th century remained intact (Figure 3-10a). None are currently



used as schools. Many have been converted to private homes, their integrity diminished by additions and modern conveniences (Figure 3-10b). A number of these have been converted to "quaint" shops and markets. Some are used as warehouses or garages.



Figure 3-10. (a) Public School No. 3 in Millcreek Township is a Victorian Pattern Book building (c. 1897) which has maintained its exterior integrity despite its current use as a gift shop. (b) This old schoolhouse in North East Township has lost its integrity due to conversion to a residential dwelling.

Table 3-10 lists those resources which are included in the National Register of Historic Places, those resources which have been determined to be eligible for the Register by the Pennsylvania Historical and Museum Commission, and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility.

3.4.7 Public Accommodations

3.4.7.1 Resources Inventoried

Public accommodations were important within the coastal zone since the early 1800's. Accommodations were particularly important along the Buffalo and Ridge Road during the first half of the 19th century



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

PUBLIC INSTITUTIONS

Historic or Common Name	Address	Survey Code
Schoolhouse built in 1817	111 E. Main Rd. North East Twp.	049-37-17-39-18
Erie County Courthouse	140 W. 6th St. Erie	049-ER-Z1-4005-102
Firefighters' Museum	428 Chestnut St. Erie	049-ER-Z5-4014-200
Avonia School Public School No. 1	7490 Hathaway Dr. at Avonia Rd. Fairview Twp.	049-21-10-11-96
Soldiers and Sailors Home	560 E. 3rd St. Erie	049-ER-Z11-1025-105
School District No. 6	8262 Gulf Rd. North East Twp.	049-37-26-80-4
Public School No. 4	414 W. 5th St. Erie	049-ER-Z5-4014-211
Public School N. 3	6610 West Lake Rd. Millcreek Twp.	049-33-22-11-182.02
Fire Station and Town Hall	Vine St. North East Boro	049-NE(36)-5-31-6,7
Hook and Ladder ** No. 1 and No. 2	West side of French and 4th and State Sts Erie	049-ER-Z2-1002-203
Josephine E. Scouller School	N. Lake St. North East Boro	049-NE(35)-2-16-12 13 and 14

<sup>*
**</sup> On National Register
Eligibility for National Register determined by PHMC



Table 3-10 (continued)

(continued
`	,

Historic or Common Name	Address	Survey Code
Erie County Public * Library, Main Branch	3 S. Perry Square Erie	049-ER-Z2-1001-200
Federal Building and Courthouse	617 State St. Erie	049-ER-Z2-1001-204



and during the railroad era in the latter half of the 19th century. Accommodations were also important as municipalities grew as commercial centers. Resources inventoried within this organizational unit are inns and tayerns.

Three resources were inventoried for the 1800-1850 temporal unit. Six resources were inventoried for the 1850-1900 temporal unit, and one for the 1900-1950 temporal unit. Table 3-11 presents a thematic breakdown of resources included in this unit.

3.4.7.2 Status, Recognition, Protection and Conclusions

One resource, the Perry Memorial House/Dickson Tavern (049-ER-Z2-1006-215) in Erie is on the National Register of Historic Places (Figure 3-11).



Figure 3-11. The Perry Memorial House/Dickson Tavern in the City of Erie is on the National Register of Historic Places.

Frank's Hotel (049-ER-Z2-1002-200), also in Erie, had been dotermined to be eligible for the National Register of Historic Places by the Pennsylvania Historical and Museum Commission. Structural problems have made rehabilitation unfeasible, and therefore the building was demolished. Very few historically significant public accommodations remain. The majority have been demolished. Some have been converted



THEMATIC BREAKDOWN:

PUBLIC ACCOMMODATIONS

		Total Number
1.	SURVEY UNITS	10
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 3 6 1 1
3.	CLASSIFICATION Site Structure Object Building N.R.	0 0 0 10 0
4.	*STYLE, DESIGN, FOLK TYPE Vernacular, Greek Revival Vernacular, 19th Century Federal Neo-Classicism Commercial Victorian Romanesque Victorian Commercial Row Undetermined	1 2 1 2 1 1 2
5.	*FUNCTION Original and/or Present Use Inn Commercial Apartment Miscellaneous, non-residential Single Family	3 7 1 1 2

^{*} Because of the fact that a site may have a multiple, use, style and period, total numbers may exceed total Survey Units.



to residences. Most of those that remain and were inventoried are historically significant.

Resource 049-37-16-35-14 was once an inn and tavern situated on the Buffalo Road in North East Township (built in 1812). Research was unable to provide the name of this inn. This is perhaps the oldest remaining inn along the road (Figure 3-12).

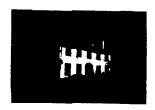


Figure 3-12. This building was once an inn and tavern situated along the Buffalo Road in North East Township (c. 1812).

The Lakeside Motel (049-37-5-6-41), an inn built in 1835 along Old Freeport Road in North East Township, was an "underground railroad station" for run-away slaves.

The Palace Hotel (049-NE(35)-10-45-3) in North East Borough was built in 1877, the same year as the opera house (Figure 3-13).



Figure 3-13. The Palace Hotel in North East Borough (c. 1877) was considered a major social center in the Borough, growing up around the developing railroad.



These two buildings were considered the social centers of North East, growing up around the developing railroad. The hotel has been recently renovated inside and is still in use today. Haynes House (049-NE(36)-5-31-1) in the potential North East Borough business district was built in 1890. It remains intact, its street level partitioned by a number of contemporary businesses (Figure 3-14).



Figure 3-14. The Haynes House (c. 1890) is part of the proposed commercial district in North East Borough.

Table 3-12 lists those resources which are included in the National Register of Historic Places, those resources which have been determined to be eligible for the Register by the Pennsylvania Historical and Museum Commission and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility.

3.4.8 Transportation

3.4.8.1 Resources Inventoried

Transportation in the coastal zone involved roads, railroads, and lake transport. Resources inventoried for this organizational unit include a cobblestone road, lighthouses, canal basins, railroad depots, a Coast Guard station, a pier, a bridge, and an airport.



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

PUBLIC ACCOMMODATIONS

Historic or Common Name	Address	Survey Code
Perry Memorial House/ Dickson Tavern*	201 French St. Erie	049-ER-Z2-1006-215
"Unnamed" Inn	12020 E. Main Rd. North East Twp.	049-37-16-35-14
Lakeside Motel	101 Old Freeport Rd. North East Twp.	049-37-5-6-41
Frank's Hotel**	432-28 French St. Erie	049-ER-Z2-1002-200
Short's Hotel (Palace Hotel)	90 S. Pearl St. North East Boro	049-NE(35)-10-45-3
Haynes' House	1-9 E. Main St. North East Boro	049-NE(36)-5-31-1

<sup>*
**</sup> On National Register
Eligibility for National Register determined by PHMC



Three resources were inventoried for the 1800-1850 temporal unit.

Of these, one, Dobbins Lane (049-ER-Z1-4045) in Erie, a cobblestone road, is possibly of the time period for the 1850-1900 temporal unit. Five resources were inventoried for the 1850-1900 temporal unit. Three resources were inventoried for the 1900-1950 temporal unit. Table 3-13 presents a thematic breakdown of resources included in this unit.

3.4.8.2 Status, Recognition, Protection and Conclusions

Only one resource, the Land Lighthouse (049-ER-Z12-1045-300) of Erie, is on the National Register of Historic Places (Figure 3-15).



Figure 3-15. The Land Lighthouse of Erie was the first lighthouse built by the government on the Great Lakes in 1818. It is on the National Register of Historic Places.

This was the first lighthouse built by the government on the Great Lakes in 1818. Its integrity has been maintained. Other resources reflect the development of lake transportation. The East and West Canal Basins (049-ER-1046-123 and 4049-500), which are located at the north end of State Street represent the terminal points of the Erie Extension of the Pennsylvania Canal System. The Presque Isle Lighthouse (049-33-11-35-1) began operation in 1873. It is now run automatically by a time-clock system. The Erie Coast Guard Station (049-33-11-35-1) was established



THEMATIC BREAKDOWN:

TRANSPORTATION

		Total Number
1.	SURVEY UNITS	12
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 2 6 3 2
3.	CLASSIFICATION Site Structure Object Building N.R. Undetermined	2 2 0 7 0
4.	*STYLE, DESIGN, FOLK TYPE Vernacular Victorian Utilitarian Undetermined Not applicable *FUNCTION	2 1 3 6
5.	Original and/or Present Use Lighthouse Canal Cobble Street Train Depot Single Family Coast Guard Miscellaneous, non-residential Dock COMM Museum Not applicable Undetermined	2 1 1 3 1 1 3 1 1 1 3 1

^{*} Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



at the turn of the century. The Public Dock (049-Z13-4049-100.01) was established at the foot of State Street in the 1840's and has undergone several episodes of rehabilitation since then.

Railroad activity is reflected by three depots built in 1852, 1880 and 1882, respectively. The oldest of these, the Avonia Depot (049-21-48-000-1.10) in Fairview Township, was the acting train station for the Avonia section of Fairview. It was also used as a feed mill. The building is now vacant and in poor condition (Figure 3-16a). The train station (049-NE(36)-7-54-14) in North East Borough which serves as the Museum of the Lakeshore Railway Historical Society, is in excellent condition (Figure 3-16b). The "Nickle Plate Station" (049-NE(36)-10-60-12) (built in 1882) in North East was used for passengers and freight shipment (Figure 3-16c). It is now used for storage only.

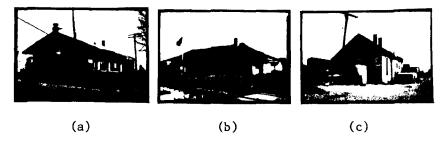


Figure 3-16. Three depots reflect railroad activity during the latter half of the 19th century. (a) Avonia Depot in Fairview Township (c. 1852), (b) The Museum of the Lakeshore Railway Historical Society in North East Borough (c. 1880) and (c) The "Nickle Plate Station" (c.1882) in North East Borough.

Table 3-14 lists those resources which are included in the National Register of Historic Places, those resources which have been determined



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

TRANSPORTATION

Historic or Common Name	Address	Survey Code
Old Land Lighthouse *	Erie	049-ER-Z12-1045-300
Dobbins Lane	between State and Sassafras south of W. Front St. Erie	049-ER-Z1-4045
Avonia Depot	Middle Road off Avonia Rd. Fairview Twp.	049-21-48-000-1.10
Presque Isle Lighthouse	Presque Isle State Park	049-33-11-35-1
Museum Station	Wall Street North East Boro	049-NE(36)-7-54-14
Nickle Plate Station	N.S. Gramville North East Boro	049-NE(36)-10-60-12
East and West Canal Basins	Erie	049-ER-1046-123 and 4049-500

<sup>*
**</sup> On National Register
Eligibility for National Register determined by PHMC



to be eligible for the Register by the Pennsylvania Historical and Museum Commission and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility.

3.4.9 Industry

3.4.9.1 Resources Inventoried

Although industrial activity was noteworthy as early as the late 1700's (see section on historical background), little remains of the multitude of industries which existed. Indeed no industrial resources were inventoried prior to 1850. These have been destroyed and may remain only as potential archaeological sites. Resources inventoried in this organizational unit include a winery, municipal waterworks, a cigar factory, a milling company, confectionary plant, windmill, paper companies, a tempered copper company, iron foundaries and iron ore docks, food processing plants, water control products manufacturing, refrigeration manufacturing, gasoline-electric locomotive equipment manufacturing, ship turbine manufacturing, artillery shell manufacturing, a power plant, a printing company, electrical material manufacturing, filtration and pumping station.

Eight resources were inventoried for the 1850-1900 temporal unit.

Twelve resources were inventoried for the 1900-1950 temporal unit.

Table 3-15 presents a thematic breakdown of resources included in this unit.



THEMATIC BREAKDOWN:

INDUSTRIAL

		Total Number
1.	SURVEY UNITS	. 21
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 0 8 15 0
3.	CLASSIFICATION Site Structure Object Building N.R.	0 8 0 13 0
4.	*STYLE, DESIGN, FOLK TYPE Vernacular 19th Century Industrial Commercial Victorian Industrial 20th Century Industrial Art Moderne Early 20th Century Industrial 1930's Public Works Modern Public Works Undetermined	6 1 3 1 1 2 1 1 1 4
5.	*FUNCTION Original and/or Present Use Winery Filtration Plant Commercial Windmill Industrial Miscellaneous, non-residential City Water Standpipe Factory Single Family Inn	1 1 6 1 7 3 1 2

^{*} Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



3.4.9.2 Status, Recognition, Protection and Conclusions

No resources from this unit are included in the National Register of Historic Places although a number of resources have been determined to be eligible by the Pennsylvania Historical and Museum Commission.

Among the more notable resources found during the windshield and other surveys are the following: The South Shore Winery (049-37-5-47-8) (built in 1860) in North East Township was the first winery in Erie County. It is currently in operation as the South Shore Inn and has limited integrity. The Erie Waterworks (049-ER-Z13-4048-200 and 203), built in 1870 and incorporating a 250-foot iron standpipe, was then the largest structure of its kind in the United States. Its condition is poor and integrity good (Figure 3-17).



Figure 3-17. The Erie Waterworks in City of Erie (c. 1870) was once the largest structure of its kind in the United States.

A cigar factory (049-ER-Z6-4027-101), in the city of Erie (built in 1877), is currently being renovated as a residence. Both the Hammermill Paper Company (049-ER-1003-100,2) and General Electric Company (049-29-7-17-1) complexes (Figure 3-18) are still in use, although portions of the latter have been and are being closed. Both industries were extremely



important to social and commercial development in the coastal zone in the first half of the 20th century and remain so today.



Figure 3-18. The General Electric Company is a major employer in the City of Erie.

The Pennsylvania Division of Coastal Zone Management has funded the Preservation Project, Inc. of Erie to do a structural and reuse feasibility study of the Modern Tool Company in Erie (049-ER-Z2-1003-100) (Figure 3-19).



Figure 3-19. The Modern Tool Company (c. 1890's) located in the proposed lower State Street commercial district, is being evaluated by Preservation Project, Inc. of Erie for possible reuse.

The Keystone Cooperative Grape Association (049-NE(35)-7-54-11) was founded in 1901 and remains important to the grape industry in the eastern part of the coastal zone study area. The Durico Paper Company building (049-ER-Z2-1002-205) in Erie, located within the potential lower State Street Commercial District (as is the Modern Tool Company



building) was formerly a confectionary plant in the 1890's and is a good turn-of-the-century industrial building. Table 3-16 lists those resources which have been determined to be eligible for the National Register of Historic Places by the Pennsylvania Historical and Museum Commission and those which have been singled out by this and other surveys as deserving more research for possible determination of eligibility.

3.4.10 Residences

3.4.10.1 Resources Inventoried

By far, the overwhelming majority of historical and architectural resources found within the coastal zone study area are residences. The selection of resources for the inventory included residences of noteworthy individuals, such as early settlers and "prime movers" within the developing communities and residences which reflected the variety and richness of architectural expression within the coastal zone. An effort was made to include not only the residences of the wealthy members of the community but of working class peoples also. Twentyeight resources were inventoried for the 1800-1850 temporal unit. The majority of these are residences of historically noteworthy families and individuals. About 145 resources were inventoried for the 1850-1900 temporal unit. The majority of these represent the variety of architectural expression within the coastal zone. Some 123 resources were inventoried for the 1900-1950 temporal unit. The majority of these, also, reflect architectural variety for the period. Table 3-17 presents a thematic breakdown of resources included in this unit.

3-83



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

INDUSTRY

Historic or Common Name	Address	Survey Code
South Shore Winery	1120 Freeport Rd. North East Twp.	049-37-5-47-8
Erie City Waterwords	West Front Street	049-ER-Z13-4048- 200 and 203
Cigar Factory	808 W. 4th St. Erie	049-ER-Z6-4027-101
Neiger Milling Co.	4 N. Lake St. Lake City Boro	049-28-13-18-1
Durico Paper Co.	402-408 French St. Erie	049-ER-Z2-1002-205
Denio Windmill	Denio St. at Hall St. Lake City Boro	049-28-9-15-2
Hammermill Paper Co.	East Lake Rd. Erie	049-ER-1103-100,-2
Eureka Elec. Products	79 Clay St. North East Boro	049-NE(36)-10-38-7
Modern Tool Co.	NE Corner of 4th and State Sts. Erie	049-ER-Z2-1003-100
General Electric Co.	2901 East Lake Rd. Lawrence Park Twp.	049-29-7-17-1
Keystone Cooperative Grape Association	Wall Street North East Boro	049-NE(35)-7-54-11
Filtration and Pumping Stations	Sommerheim Drive Millcreek Twp.	049-33-13-34-6

^{*} On National Register

** Eligibility for National Register determined by PHMC



THEMATIC BREAKDOWN:

RESIDENCES

		Total Number
1.	SURVEY UNITS	293
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 35 146 136
3,	CLASSIFICATION Site Structure Object Building N.R.	0. 2 · 0 274
4.	*STYLE, DESIGN, FOLK TYPE	
	Beaux Arts Bungalow Bungalow, California Bungalow, Tudor Style Chateauesque Colonial, 1930s imitation Colonial Revival Commercial Eclectic Queen Anne Eclectic Queen Elizabeth/Stick Sty Federal Federal/Victorian Federal/2nd Empire additions Federal with many additions and ch Federal/late with Victorian modifi Federal/modified Georgian Georgian Revival Greek Greek with modified pebble veneer Italianate Italianate, modified Italianate, late	10 1 1 anges 1
	Italian Villa 3-85	1
	 .	



Table 3-17 (continued)

Total Number

*STYLE, DESIGN, FOLK TYPE (continued)

Modernistic, Prarie influence	2
Modernistic, Tudor Revival	1
19th Century Vernacular	2
19th Century Eclectic Pattern book	1
19th Century Vernacular with Bungalow inf.	1
Neo-classicism	3
Prarie	1
Queen Anne/Shingle Style	1
Richardsonian Romanesque	1
2nd Empire	11
2nd Empire duplex	1
Shingle style	9
Shingle style, modernistic	1
Spanish, modern imitation	1
Standardized Pattern Book House	1
Stick Style, late	1
Tudor	1
Tudor Revival	4
Tudor Revival, Victorian	1
20th Century Period Revival	5
20th Century Vernacular	2
Victorian, Late	. 1
Victorian Row House	1
Victorian cottage	1
Victorian cottage, altered	1
Victorian vernacular	11
Victorian vernacular, late	1
Victorian Stick Style	1
Victorian Swiss Chalet	1
Victorian Italianate	2
Victorian gingerbread	1
Victorian Romanesque	2
Victorian with vernac, QueenAnne and mod.add	
Victorian Gothic	1
Victorian 2nd Empire	1
Vernacular	95
Vernacular/Federal	2
Vernacular/Italian Villa influence	3
Vernacular/Victorian with added Bungalow porch	1
vernacutar/Queen Anne	3
Vernacular/Greek	1
Turn-of-the-Century Vernacular	1
Vernacular Farm House	1
Vernacular, 1940s Modernistic	1



Table 3-17 (continued)

Total Number

*STYLE, DESIGN, FOLK TYPE (continued)

Victorian		1.5
Victorian	Eclectic, QueenAnne-Stick Style	ر. 1
Victorian	Eclectic with Italiante inf.	
Victorian	Eclectic Pattern Book	2
Victorian	Romanesque	3
Undetermin	ned	11

5. *FUNCTION

Original and/or Present Use

Single Family	164
Two Family	45
Multi Family	54
Apartment	. 3
Club	2
Commercial	20
Church	1
School	1
Governmental	1
Miscellaneous institutional	· 2
Miscellaneous, nonresidential	7
Undetermined	7

^{*} Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



3.4.10.2 Status, Recognition, Protection, Districts, and Conclusions

Several resources have been either included on the National Register of Historic Places or have been determined to be eligible for the Register. The John Hill House (049-ER-Z1-4008-134) in Erie is on the Register. Built in 1825, it is in a bad state of disrepair and appears to require extensive costly rehabilitation (Figure 3-20a). The Reed Mansion (049-ER-Z1-4005-100), also in Erie, is also on the Register (Figure 3-20b). Its condition is good since it is maintained by the Erie Club which resides within its walls. The Cashier's House (049-ER-Z2-1002-212), in Erie, is on the Register (Figure 3-20c). It has been the home of the Erie County Historical Society and is owned by the Pennsylvania Historical and Museum Commission.

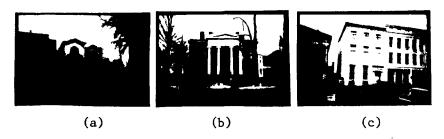


Figure 3-20. (a) The John Hill House (c. 1825); (b) The Reed Mansion (c. 1833); and (c) The Cashier's House (c. 1839) are all on the National Register of Historic Places. They are all located in downtown Erie.

The Hugh Cunningham House (c. 1807) is considered to be the oldest house remaining in the City of Erie (049-ER-Z2-1006-229). The Pennsylvania Historical and Museum Commission has determined it is eligible for inclusion in the National Register of Historic Places (Figure 3-21).





Figure 3-21. The Hugh Cunningham House on East 3rd Street in Erie is considered to be the oldest house remaining in the City of Erie.

The abundance of noteworthy resources within this organizational unit does not permit a discussion of each such resource. Specific historical and architectural significance is discussed on the survey form for each resource in Appendix A. Table 3-18 lists those resources which are on the National Register of Historic Places, those resources which have been determined to be eligible for the Register by the Pennsylvania Historical and Museum Commission, and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility. Although certain resources have been determined to be eligible for the Register by the Pennsylvania Historical and Museum Commission, this does not insure their protection and preservation. For example, the James Sterret House (049-ER-Z2-1008-123) in Erie was demolished as part of the Erie Insurance Exchange expansion within the Urban Development Action Grant study area.

A number of resources occurred in concentrations within municipalities. The most noteworthy of these concentrations is located



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

RESIDENCES

Historic or Common Name	Address	Survey Code
Samuel Holliday House	Holliday Rd. Springfield Twp.	049-39-4-2-2
** Hugh Cunningham House	136 E. 3rd St. Erie	049-ER-Z2-1006-229
	51 E. Main North East Boro	049-NE(36)-5-33-8
Alexander Brewster House	156 E. 5th St. Erie	049-ER-1005-226
John Hill House*	230 W. 6th St. Erie	049-ER-Z1-4008-134
Hoskinson Double House	127-29 W. 6th St. Erie	049-ER-Z1-4004-202, 203
Interchurch Ministries	235 W. 6th St. Erie	049-ER-Z1-4007-206
Carriage House for Cashier's House/Customs House Complex**	11 E. 4th St. Erie	049-ER-Z2-1002-208
Cashier's House*	417 State St.	049-ER-Z2-1002-212
	Rte. 20 at Mooreheadville Rd. Harborcreek Twp.	049-27-31-119-8
Caughey House	7585 W. Lake Rd. Fairview Twp.	049-21-47-62-1.01
Short St. Rowhouses	210 Short St. Erie	049-ER-Z1-4043-235,-231 -232,-233

<sup>*
**</sup> On National Register
Eligibility for National Register determined by PHMC



Table 3-18 (continued)

Historic or Common Name	Address	Survey Code
Kennedy Row Houses	158-62 E. 5th St. Erie	049-ER-Z2-1005-201
P.S.V. Hamot House	302 French St. Erie	049-ER-Z2-1006-103
Judah Colt Residence**	343 E. Front St. Erie	049-ER-Z2-1052-113
Miles Holliday House	Holliday Road E. Springfield Twp.	049-39-27-3-1.01
Erie Club/Reed Mansion*	524 Peach St. Erie	.049-ER-Z1-4005-100
Gilpin Manor	59 E. Main North East Boro	049-NE(36)-5-33-10
	55 E. Main North East Boro	049-NE(36)-5-33-9
	9754 W. Lake Rd. Girard Twp.	049-24-4-7-16
	8721 Buffalo Rd. Hárborcreek Twp.	049-27-31-119-4
	Eagley Rd. Springfield Twp.	049-39-3-13-8
	Holliday Road Springfield Twp.	049-39-4-2-8
C.M. Tibbals House	146 E. 5th St. Erie	049-ER-Z2-1-05-225
	238 W. 6th St. Erie	049-ER-Z1-4008-132
	1201 Dutch Rd. Fairview Twp.	049-21-28-17-11
	20 Gibson St. North East Boro	049-NE(35)-2-19-8



Table 3-18 (continued)

Historic or Common Name	Address	Survey Code
Wood-Mansion House	338 W. 6th St. Erie	049-ER-Z1-4011-120
	8760 W. Lake Rd. Girard Twp.	049-24-3-10-20
	6766 Buffalo Rd. Harborcreek Twp.	049-27-34-33-108
	2230 W. 8th St. Millcreek Twp.	049-33-14-43-29
	135 E. 6th St. Erie	049-ER-Z2-1004-210
David Kennedy House	424-426 Holland St. Erie	049-ER-Z2-1005-201
	334 W. 6th St. Erie	049-ER-Z1-4011-121
Peter Rockwell House**	405 State St. Erie	049-ER-Z2-1002-210
	308 French St. Erie	049-ER-Z2-1003-102
	7871 W. Lake Rd. Fairview Twp.	049-21-48-63-19
McCreary Mill and Home	7558 Hathaway Dr. Fairview Twp.	049-21-9-5-4-3
Capt. Richard's House	121 E. 2nd St. Erie	049-ER-Z2-1006-212
	1640 Moorehead Road Harborcreek Twp.	049-27-31-122-6
Spencer Double House	529 W. 6th St. Erie	049-ER-Z5-4016-205
Addison Leach House	462 W. 6th St. Erie	049-ER-Z5-4014-128



1	r	റ	n	t	in	,,	ے	d	1
١	L	v	£ί	L	TIL	u	c	u	1

Historic or Common Name	Address	Survey Code
	65 S. Lake St. North East Boro	049-NE(35)-5-27-13
	63 S. Lake St. North East Boro	049-NE(35)-5-27-13-01
	332 W. 6th St. Erie	049-ER-Z1-4011-122,121
	10832 E. Lake Rd. North East Twp.	049-37-2-6-8
	328 W. 6th St. Erie	049-ER-Z1-4011-124
Colt Mansion	628½ E. 6th St. Erie	049-ER-Z11-1021-116
Carroll Block ** (Mission Block)	425-31 Peach St. Erie	049-ER-Z1-4002-215
Olds House	345 W. 6th St. Erie	049-ER-Z1-4010-210
	310 French St. Erie	049-ER-Z2-1003-101
	216 W. 4th St. Erie	049-ER-Z1-4009-141
	11930 Rte. 20 North East Boro	049-NE(37)-17-39-15
J.C. Spencer House	519 W. 6th St. Erie	049-ER-4016-203
Olds House (one of many)	349 W. 6th St. Erie	049-ER-Z1-4010-211
	10765 W. Main St. North East Twp.	049-37-19-71-9
Lakeside Cemetery Bldg.	1718 East Lake Rd. Erie	049-ER-Z11-1107-100



Table 3-18	
(continued)	

	(concluded)	
Historic or Common Name	Address	Survey Code
Davenport Galbraith House	259 W. 6th St. Erie	049-ER-Z1-4007-208
Erie Historical Museum	356 W. 6th St. Erie	049-ER-Z1-4011-119
	405 W. 6th St.	049-ER-Z1-4013-202
James Sterret House**	501-503 Holland St. Erie	0490-ER-Z2-1008-123
Olds House	333 W. 6th St. Erie	049-ER-Z1-4010-207
Olds House	337 W. 6th St. Erie	049-ER-Z1-4010-208
Olds House	341 W. 6th St. Erie	049-ER-Z1-4010-209
Strong Mansion	109 W. 6th St. Erie	049-ER-Z1-4004-201
Arbuckle Murphy House	140 E. 5th St. Erie	049-ER-Z2-1005-224
First Presbyterian Church Parsonage	Buffalo Rd. Harborcreek Twp.	049-27-34-33-111
Villa Maria College (administration)	2531 W. Lake Rd. Millcreek Twp.	049-33-31-47-2
	81 Vine St. North East Boro	049-NE(36)-5-42-9
	83 S. Lake Rd. North East Boro	049-NE(35)-10-46-5
Ross House	52 N. Lake St. North East Boro	049-NE(36)-2-15-40
	45 Park St. North East Boro	049-ER-Z5-4017-122
Robert Jarecki Mansion	558 W. 6th St. Erie	049-ER-Z5-4017-122
	3-94	



Table 3-18 (continued)

Historic or Common Name	Address	Survey Code
	629 Myrtle St. Erie	049-ER-4007-210
Otto Becker Estate	652 W. 6th St. Erie	049-ER-Z5-4020-139
	64 S. Lake St. North East Boro	049-NE(36)-5-43-24
	25 Towne St. North East Boro	049-NE(36)-2-14-5
	84 W. Main St. North East Boro	049-NE(35)-1-21-30
	8 Gibson St. North East Boro	049-NE(35)-2-16-15
	59 Gibson St. North East Boro	049-NE(35)-1-21-13
	409-415 W. 6th St. Erie	049-ER-Z5-4013-203
American Red Cross Bldg.	150 W. 6th St. Erie	049-ER-Z1-4005-103
	246 W. 6th St. Erie	049-ER-Z1-4008-131
	520 W. 6th St. Erie	049-ER-Z5-4017-127
Frank Connell House	502 W. 6th St. Erie	049-ER-Z5-4017-100
Siegel Mansion	609 Walnut St. 459 W. 6th St. Erie	049-ER-Z5-4013-209
Kirk House/ George Wingerger House	627 Myrtle St. Erie	049-ER-Z1-4007-209
Collins House	620 W. 6th St. Erie	049-ER-Z5-4020-139



Table 3-18 (continued)

Historic or Common Name	Address	Survey Code
	43 Park St. North East Boro	049-NE(35)-2-19-2
	1552 South Shore Dr. Erie	049-ER-4113-105
	1460 South Shore Dr. Erie	049-ER-4109-105
	10940 East Lake Rd. North East Twp.	049-37-2-6-11
	5436 East Lake Rd. Harborcreek Twp.	049-27-3-8-31
	6602 West Ridge Rd. Fairview Twp.	049-21-55-81-6.02



within the City of Erie, along West 6th Street between Perry Square and Gridley Park.

This area has been mentioned as a possible Historic District.

It represents Erie's "Millionnaire's Row." The potential district includes great temporal to architectural variety. Many of these were in the past, and continue to be, residences of entrepreneurs and "pillars" of the community (Figure 3-22).





Figure 3-22. West 6th Street between Gridley Park and Perry Square (a small portion of which is shown here) housed many of the City of Erie's entrepreneurs and "pillars" of the community. It has been proposed as a possible residential Historic District.

In recent years, many residences and associated carriage houses along the street have been converted to multiple family dwellings, fraternity houses, office buildings, university buildings, and a museum among other alternate uses. For the most part, the exterior integrity of most buildings has been maintained although not necessarily their good repair. The ravages of urban renewal in the form of demolition have, with a very few exceptions, not affected this area. Therefore, as a potential district, there continues to be thematic continuity.



3.4.11 Miscellaneous

This organizational unit includes monuments and artifacts signifying important historical events and personages within the coastal zone area. Five resources were inventoried. These include the Flagship Niagara (049-ER-Z1-4049-107), the prow of the U.S.S. Wolverine (-049-ER-Z1-4049-107) (both in the City of Erie), Gibson Park, Spanish-American War memorial (049-NE(35)-2-17-1) in North East Borough, North East cemetery (049-37-19-58-53 and 53.01) stone marker and drummer boy statue in North East Township and the war memorial to commemorate the victory of Commodore Oliver Hazard Perry (049-33-11-35-1) in the Battle of Lake Erie on September 10, 1813 on Presque Isle Peninsula. Table 3-19 presents a thematic breakdown of these resources.

Of these resources, the Flagship Niagara is currently on the National Register of Historical Places (Figure 3-23).



Figure 3-23. The Flagship Niagara is on the National Register of Historic Places.

Its site is owned and operated by the Pennsylvania Historical and Museum Commission-Bureau of Historic Sites and Properties. The ship itself is on dry land. It is subject to periodic vandalism and weathering and



THEMATIC BREAKDOWN:

MISCELLANEOUS

		Total Number
1.	SURVEY UNITS	5 .
2.	*SURVEY UNITS BY TIME PERIOD 1 (before 1800) 2 (1800-1849) 3 (1850-1899) 4 (1900-1950) Undetermined	0 2 1 3
 4. 	CLASSIFICATION Site Structure Object Building N.R. Not Applicable *STYLE, DESIGN, FOLK TYPE	0 1 4 1 0 5
5.	*FUNCTION Original and/or Present Use Monument Public Square Cemetery Miscellaneous, non-residential Church School Not applicable	1 1 1 1 1 1

^{*} Because of the fact that a site may have a multiple use, style, and period, total numbers may exceed total Survey Units.



is not considered to be in the best repair. Table 3-20 lists those resources which are included in the National Register of Historic Places and those which have been singled out by this and other studies as deserving more research for possible determination of eligibility.

3.5 Overall Conclusions

The historic resource inventory presented in Appendix A is essentially complete. The West County Survey (Claridge 1979), The City of Erie Survey (1982), and the survey done under the auspices of this contract all met Pennsylvania Historic Site Inventory requirements. Inventory forms were filled out for each resource of each set of resources considered. Certainly no historic survey effort can be 100 percent complete. As new data becomes available, the incomplete inventory forms can be completed and new resources can be inventoried. Nevertheless, the current inventory documents, in some detail, the great majority of architectural and historical resources to be found within the coastal zone study area. Although urban redevelopment, highway projects, etc. may destroy certain of these resources, the fact that they existed at all will have been documented by the inventory, and subsequently a part of them preserved. For example, as of this writing, the James Sterret House at Fifth and Holland Streets in Erie has been demolished. The needs of the Erie Insurance Exchange Complex and overall Urban Development Action Grant redevelopment area carried precedence over the determination of eligibility for the Register by the Pennsylvania Historical and Museum Commission. A number of other



RECOMMENDATIONS FOR CONSIDERATION OF ELIGIBILITY FOR THE NATIONAL REGISTER OF HISTORIC PLACES:

MISCELLANEOUS

Historic or Common Name	Address	Survey Code
* Flagship Niagara	State Street	.049-ER-Z1-4049-107
Wolverine	State Street	049-ER-Z1-4049-107

^{*} On National Register Eligibility for National Register determined by PHMC



eligible structures such as Frank's Hotel have fallen to the demolition ball because of structural difficulties, position of the right-of-way of the Bayfront Highway, etc. Despite these demolitions, the City of Erie is very concerned with historic preservation. For example, the city government has created a position to coordinate the development of the waterfront area which would include the development of the potential lower State Street Historic District. Outside the City of Erie, few threats to historic resources are expected. However, as new industrial growth, redevelopment, etc. occur in the coastal zone (outside the City of Erie) threats to these resources will potentially increase.

The inventory and maps (Figures A-2 through A-7) can be used to locate historic resources which would be potentially impacted by a particular project. Once a site is located, the inventory form will provide a physical and/or historical description of the resource. This can be used to direct further research or may be sufficient to determine whether or not the resource should be preserved.

To conclude, the inventory, presented in this document, represents the most thorough and complete compilation of data concerning historic resources ever attempted in the study area or in Erie County, for that matter. Therefore, the inventory itself is an important planning document.



4.0 OVERALL CONCLUSIONS, RECOMMENDATIONS AND SUGGESTED USE OF REPORT BY PLANNERS

There were three major results from the research which culminates in this report:

- 1. A map identifying areas of high, moderate and low probability of occurrence of archaeological sites.
- An inventory of known archaeological and historic sites.
- Maps showing the location of inventoried archaeological and historic sites.

4.1 Archaeological Sites

The archaeological site inventory found in Appendix A <u>includes</u>

<u>all sites</u> on file with the Pennsylvania Historical and Museum Commission, known sites discovered by archival research, and sites discovered when testing the predictive model. This inventory in no sense includes all possible sites that are located within the Lake Erie Coastal Zone.

Most survey efforts have focused their attention on the western portion of the coastal zone. However, such surveys have tended to focus their efforts on specific locations for which a variety of developmental projects were planned (e.g. the U.S. Steel Plant location and the Elk Creek Public Access area). Many gaps in the survey of the western portion of the study area exist. The eastern portion of the coastal zone has been, for the most part, neglected by archaeological surveys. The predictive model as represented by the map (Figure A-1) enables the planner to make reasonable decisions



which anticipate the presence or absence of possible sites in those areas for which no sites have been identified to date. The question remains, "How is the planner who is responsible for activities associated with permit letting to use the inventory and the predictive study?" The following are recommendations for their use.

Given a particular area for which a project is being proposed, the planner can at the earliest possible date:

1. Locate any sites which have been identified by this survey on maps in Appendix A (Figures A-2 through A-7).

(The sites are represented on the maps by numbers. The general location of each is given, not the exact location, to protect sites from pot hunters which may gain access to this report.)

2. Locate specific site information on the appropriate inventory forms located in Appendix A.

(Accompanying each site location map is a key which correlates the site location number on the map with the site's State identification number and cultural period with which the site was classified for this report. The sites are organized sequentially by State inventory number within each cultural period group.)

3. Determine whether the target area has a high, moderate or low likelihood of archaeological sites if no sites have been identified.

(The sensitivity map (Figure A-1) coded each class of sensitivity symbolically across the whole coastal zone study area.)

This identification process, so vital to determining succeeding steps, may take as little as five minutes.

Once this information is accessed, the planner is in a position to initiate steps to determine the effect of a proposed project on identified



or potential archaeological sites. Appendix C includes summaries of pertinent legislation which may assist the planner in deciding on possible courses of action. The planner is especially urged to utilize the criteria established by regulations of Advisory Council on Historic Preservation in The Advisory Council on Historic Preservation and the Protection of Cultural Resources (1979). The planner should also seek comments and interpretations from federal and state agencies, especially the State Historic Preservation Officer (SHPO). Finally, the information in this report can assist the planner in avoiding regulatory delays.

The following specific steps are recommended for further archaeological inquiry in a proposed target area located within the coastal zone study area. If a site has been located from the inventory, then a Phase II investigation is recommended. A Phase II investigation involves gathering data from actual testing of the site in order to determine site boundaries, the number of archaeological cultures represented, the stratigraphy, site function, possible activities represented, among other characteristics. This is primarily a testing phase which provides data with which the potential eligibility of a site for inclusion in the National Register of Historic Places can be determined. With the exception of sites in the Sommerheim complex and the Elk Creek Access area, such investigations have not occurred. Once the Phase II investigations have been completed, a Phase III investigation may be determined to be desirable in consultation with



the State archaeologist and the Pennsylvania Bureau of Historic Preservation. A Phase III investigation is the systematic excavation of the site to detail past behavior at the site. In any case, proper security should be maintained to protect the site from "pot hunters." Aside from a security guard and fence, "no trespassing" signs should be correctly posted. In case of trespass, prosecution should be steadfastly pursued. The Pennsylvania Historic Preservation Act prohibits unauthorized excavation on State property.

If there are no sites currently identified by the inventory within a target area, the planner's possible action will be guided by the sensitivity map. If an area is determined to be of high sensitivity, then a Phase I investigation should be initiated. This involves walk-over inspection of the land surface, shovel testing, and informant and archival research to determine whether or not a site exists. If a site is found, then at least a Phase II investigation will probably be necessary after consultation with the SHPO.

Although sites may exist in any area, the potential for encountering sites in areas shown as low or moderate on the map is far lower than high probability areas. Thus, the probability of any requirite Phase II (evaluation) or phase III (data recovery) archaeological investigations, which may necessitate major expenditure of time or money, can be significantly reduced in the earliest planning stages. Unfortunately, this does not mean that at least a Phase I survey effort can always be avoided for moderate or low sensitivity areas.



First, since the model was developed from contemporary environmental correlations, it may not be representing environmental correlations associated within environmental variables which may have changed significantly since the prehistoric past. No detailed prehistoric environmental reconstructions exist for the study area with which to develop a more sensitive model. Second, it is possible that some locations were occupied for non-environmental reasons and therefore, not predicted by the environmentally-based model. Finally, the archaeological inventory, prior to model testing, is extremely biased. Most sites were found in easily accessible locations such as stream banks. Less accessible locations are often ignored by non-systematic surveys.

Therefore, although the model is useful in directing further archaeological inquiry in high sensitivity areas, the SHPO may require specific on-the-ground investigations in moderate, and especially low, sensitivity areas. Although the statement that "further survey and excavation are necessary in the area" is almost a cliche in archaeological reports of this kind, it is here a statement of fact. Given the biases of survey efforts and the lack of evidence evailable for the majority of inventoried sites, one cannot help but conclude that each inventoried site (excluding the stated possible exceptions) must be at least systematically tested before an accurate determination of its position in prehistory can be evaluated. Furthermore, the coastal zone study area itself should be systematically surveyed



to discover the full variety of prehistoric cultural expression located within it. Based upon this data, the predictive model can then be refined. At this point, it is a good guide to further inquiry.

Of course, any archaeological investigations should be undertaken by trained archaeologists in consultation with the Bureau for Historic Preservation (SHPO).

4.2 Historic Sites

The historic site inventory, found in Appendix A, is a compilation of sites gathered from surveys covering the full expanse of the coastal zone study area. The West County Survey (Claridge 1979), the City of Erie Survey (Wolynec 1982), and the survey done under the auspices of this contract all met Pennsylvania Historic Resource Survey requirements. Certainly, no historic site survey effort can be 100 percent complete. Originals of the inventory forms are on file at the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation. Nevertheless, the current inventory documents, in some detail, the majority of architectural and historical resources to be found within the coastal zone study area.

This inventory (Appendix A) and maps showing the location of inventoried sites can be used by the planner in a manner similar to that previously discussed for archaeological sites in the preceding section.

Given a particular area for which a project is being proposed, the planner can at the earliest possible date:



1. Locate the occurrence of any sites which have been identified by this survey on maps in Appendix A (Figures A-2 through A-7).

(The exact locations of sites are represented on maps by numbers.)

2. Locate specific site information on the appropriate inventory forms located in Appendix A.

(Accompanying each site location map is a key which correlates the site location number on the map with its inventory code and thematic unit (e.g. mercantilism, residences, etc., and date of construction). Sites are organized sequentially by date of construction within each thematic grouping. Because much of the data on the form is presented symbolically, a key is included which can be used to quickly and efficiently translate the symbols (Table A-1).

Once this information is accessed, the planner can begin to evaluate the effects of a proposed project on located historic sites.

Not every site on the inventory may require further research and evaluation. Tables A-2 through A-10 in Appendix A list specific sites which may merit special attention and consideration. For these sites, further research is necessary before determination of eligibility for reuse, restoration, preservation, or inclusion in the National Register of Historic Places is attempted.

The remainder of the inventory documents sites which are old, architecturally interesting, or typical of a particular architectural or functional style, have sociological merit, among other considerations. Whether or not these sites are to be further researched should be determined in consultation with the SHPO.



Although urban redevelopment, highway projects, etc. may destroy certain of these resources, the fact that they existed at all will have been documented by the inventory and subsequently a part of them preserved.

Again, a planner's options with regard to any inventoried site, in particular those listed in Tables A-2 through A-10 in Appendix A, can be determined by consulting the SHPO among other possible federal and state agencies and the Advisory Council on Historic Preservation regulations (1979) (see Appendix C).

The planner must be aware that no one site must be preserved.

Even sites on the National Register are defined as properties "worthy of preservation" and not properties which "must be preserved" (The Advisory Council on Historic Preservation 1979: 2). What is necessary is that "take into account" standards be followed:

Procedural character. Like the National Environmental Policy Act, Section 106 is directed at securing agency adherence to procedures designed to make certain that preservation factors are weighed into the balance with the cost-benefit and other factors and all assigned their proper weight. If an agency in good faith follows the procedures, it will have "taken into account" preservation values. In all cases, final authority rests with the agency.

"Public Interest" protection. Section 106 is aimed at resolving conflicts between Federal undertakings and Register properties in a manner that reflects the public interest rather than a purely preservation or a purely project interest. The public interest differs from undertaking to undertaking, depending on the particular circumstances of the undertaking and the particular nature of the historic property. The solution



a syste**nde** kongre

may range from complete demolition to the purest preservation, depending on the circumstances. This flexible standard stands in contrast to the absolute standard of Section 4(f) of the Department of Transportation Act, which requires avoidance of the affected resource if there is a "prudent and feasible alternative."

For example, as of this writing, the James Sterret House at Fifth and Holland Streets in Erie has been demolished. The needs of the Erie Insurance Exchange complex and overall Urban Development Action Grant redevelopment area carried precedence over the determination of eligibility for the Register by the SHPO. A number of other eligible structures such as Frank's Hotel have also fallen to the demolition ball because of structural difficulties, position in the right-of-way of the Bayfront Highway, etc. In each case, preservation values were weighed against costs and public benefit according to specified procedures.

Use of the historic information presented in this report should diminish regulatory delays. Regulatory agencies recognize that the public interest can be served by preserving historic resources. Therefore, the more easily and quickly the data is available to them, the faster they can act to evaluate their options.

4.3 Conclusions

Too often the cultural resources found within a particular project area are considered obstacles to progress and growth by developers.

Planners should encourage that cultural resources merit positive consideration by planners and developers as much as rare environmental



resources. Cultural resources are not replaceable and are easily destroyed. It is hoped that the data presented in this report will enable planners to minimize or avoid the destruction of these resources by facilitating the application of prior identification and evaluation methods within the Lake Erie Coastal Zone of Erie County, Pennsylvania. In addition, it is hoped that the recognition of these resources will encourage creative development of investigations and interpretations of cultural resources and enhance this small but important irreplaceable segment of Pennsylvania's environment. For example, both specific archaeological data and the refined predictive models can provide archaeologists with data with which to examine aspects of human existence in the past. Based upon these and other sources of data, a synthesis of local culture and history, settlement pattern, resource exploitation, contacts with neighboring cultures, etc. can be undertaken. Such an undertaking will generate hypotheses for future testing and will certainly point out areas where further research is mandated.



5.0 WORKS CITED

Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation and the Protection of Cultural Resources: An Outline on the Process Established by "Protection of Historic and Cultural Properties." 36 CFR, Part 800, Washington, D.C.

Becht, Mary

1980 Coastal Zone Development Plan for the West Bay Front Area of the City of Erie. Erie County Planning Department.

Beers, F.W.

1865 Atlas of Erie County, Pennsylvania. F.W. Beers, A.D. Ellis and G.C. Soule, New York.

Behan, John Mark

1974 A Political and Social Analysis of the City of Erie, 1880-1890. Unpublished Master's Thesis, Edinboro State College, Edinboro, Pennsylvania.

Blumenson, John J.-G.

1977 Identifying American Architecture, A Pictorial Guide to Styles and Terms, 1600-1945. American Association for State and Local History, Nashville.

Brenner, Fred J.

1967 Hiking with History Along the Erie Extension Canal. Published by author, Mercer, Pennsylvania.

Brose, David S.

1978 Preliminary Investigations. U.S. Steel Impact Study. Cleveland Museum of Natural History.

1981 Archaeological Investigations in the Cuyahoga Valley
National Recreation Area. Cleveland Museum of Matural
History Archaeology Research Report 30. Cleveland.

1982 Phase II Archaeological Investigations of the Elk Creek
Public Access Site, Girard Township, Erie County, Pennsylvania. Submitted by Northwest Institute of Research to
Pennsylvania Historical and Museum Commission, Bureau for
Historic Preservation, Harrisburg, as part of An Historic
Resources Protection Plan for the Lake Erie Coastal Zone.



- Brose, David S., Bernard Werner, and Renata B. Wolynec
 1977 A Final Report on the Secondary Study: A stochastic
 predictive analysis of Erie and Crawford Counties,
 Pennsylvania and Ashtabula County, Ohio. Report
 Submitted to the Arthur D. Little Company, Cambridge,
 Massachusetts/U.S. Steel Company, Pittsburgh. Limited
 Publication. Cleveland Museum of Natural History
 - 1977 Final Report on Discriminate Archaeological Analyses of Erie and Crawford Counties, Pennsylvania and Ashtabula County, Ohio. Report submitted to the Arthur D. Little Company, Cambridge, Massachusetts. U.S. Steel Company, Pittsburgh. Limited publication. Cleveland Museum of Natural History.
- Cee Jay Frederick Associates with John Milner Associates

 1981 The Resource Protection Plan: A Framework for Decision—

 Making in Protecting the Cultural Resources of the Pennsylvania/Delaware River Coastal Zone.

Claridge, John R.

- 1979 Preliminary Report for Historic Resources Survey of Erie County. Prepared for the Erie County Department of Recreation and Public Affairs, Erie, Pennsylvania.
- Cultural Resource Management Study for Bayfront Port
 Access Road Project Legislative Route 1003, Section A00,
 Erie, Pennsylvania. Prepared for Power Allen and
 Associates.

Commonwealth of Pennsylvania

- 1971 Specifications and Requirements of Historic Resource
 Survey and Comprehensive Statewide Historic Sites
 Survey Program, Historic Museum Commission, Bureau for
 Historic Preservation, Harrisburg.
- 1978 Pennsylvania Coastal Zone Management Program Technical Record, Bureau for Resources Programming, Office of Resource Management, Harrisburg.
- 1979 Pennsylvania Coastal Zone Management Program:

 Executive Summary. Department of Environmental

 Resources, Office of Resources Management, Harrisburg.
- 1980 Pennsylvania Coastal Zone Management Program: Draft.
 Office of Resource Management, Coastal Zone Management
 Branch, Harrisburg.



Curtis, Sue Ann and James W. Hatch

1981 Cultural Resources in the Southern Lake Erie Basin:

A Predictive Study. Prepared for the U.S. Army Corps of Engineers by Argonne National Laboratory.

DeGeorge, Jon E.

1975 The commercial development of Erie County, 1810-1825.

Journal of Erie Studies 4: 20-51.

Derry, Anne, H. Ward Jandal, Carol D. Shull, Jan Thorman

1977 Guidelines for local surveys: a basis for preservation planning. National Register of Historic Places, Office of Archaeology and Historic Preservation, U.S. Department of Interior, Washington, D.C.

Erie County Metropolitan Planning Commission
1976 Erie County Historical and Architectural Preservation
Plan. Erie County Planning Department, Erie, Pennsylvania.

Fagan, Brian M.

1981 In the Beginning: An Introduction to Archaeology.
Fourth Edition, Little Brown and Co., Boston-Toronto.

Federal Writer's Project, Works Progress Administration
1938 Erie: A Guide to the City and County. William Penn
Association, Philadelphia.

Garvey, William P.

1973 The Ethnic Factor in Erie Politics, 1900-1970. Unpublished doctoral dissertation, University of Pittsburgh.

Grotzinger, Laura Ann

1975 The early automobile and its influence on Erie, Pennsylvania, 1896-1920. Journal of Erie Studies 4: 36-51.

Griffin, James B.

1964 The northeast woodlands area. In <u>Prehistoric Man in the</u>
New World, edited by J.D. Jennings and E. Norbeck,

HABS, NPS

1941 <u>Historic American Buildings Survey</u> (Inventory). Washington, D.C.: Government Printing Office

Heidt, Evans, Salata

1979 Historic Inventory, City of Erie, UDAG Area. Preliminary Report.



Hole, Frank and Robert F. Heizer

1977 Prehistoric Archaeology: A Brief Introduction.
Holt, Rinehart and Winston, New York.

Irvine, William and W. Ellicott
1795 Plan of the town of Erie (map). Publisher unknown.

Johnson, William C., James B. Richardson, III, and Allen S. Bohnert 1979 Archaeology Site Survey in Northwest Pennsylvania, Region IV. Report submitted by the Section of Man, Carnegie Museum of Natural History to Pennsylvania Historical and Museum Commission, Harrisburg.

Jones, Jeanette
1972 Erie, 1913: The molder's strike. <u>Journal of Erie</u>
Studies 2: 62-98.

Kane, John R.
1979 A history of the pipe organ industry in Erie, Pennsylvania. Journal of Erie Studies 8: 69-88.

Kent, Donald H.

1954 The French Invasion of western Pennsylvania, 1753.

Pennsylvania Historical and Museum Commission, Harrisburg.

Kent, Barry C., I.F. Smith, III, and C. McCann (editors)
1971 Foundations of Pennsylvania prehistory. Pennsylvania
Historical and Museum Anthropological Series 1. Harrisburg.

Krieger, A.D.

1964 Early man in the New World. In <u>Prehistoric Man in the New World</u>, edited by J.D. Jennings and E. Norbeck, pp. 23-81, University of Chicago Press, Chicago.

Lantz, Stanley W.

1981 A Cultural Resource Survey of the Coho Generating Station in Eric County, Pennsylvania. Prepared for the Pennsylvania Electric Company. Section of Man, Carnegie Mellon Museum of Natural History.

Lee, Alfred
1981 NOITS and Crisis Area Investigation: Study of Archaeological
Sensitivity, Lake County, Ohio. Cleveland Museum of Natural
History, Report of Investigations 32.



Little, Arthur D., Inc.

1978 Report on the Environmental Impacts of U.S. Steel Corporation's Proposed Lakefront Plant. Cambridge, Massachusetts.

Mayer-Oakes, W.J.

1955 Prehistory of the upper Ohio valley. Annals of Carnegie Museum 34, Anthropological Series 2.

Mehler, Frank E., Jr.

1979 The Erie flood of 1915. <u>Journal of Erie Studies</u> 8: 19-36.

Miller, Ernest C.

1974 <u>Pennsylvania's oil industry</u>. Pennsylvania Historical Association, Gettysburg, Pennsylvania

Miller, John

1909 A Twentieth Century History of Eric County, Pennsylvania.
Two volumes. Lewis Publishing Co., Chicago.

Schoenfeld, Maxwell P.

1979 Fort de la Presquile and the French penetration into the Upper Ohio Country, 1753-1759. Erie County Historical Society, Erie, Pennsylvania.

Spencer, Herbert Reynolds

1962 Erie. . . a history. Published by author, Erie, Pa.

Ritchie, William A.

1969 The Archaeology of New York State (2nd edition).
Natural History Press, New York.

Rosenburg, Max

1974 The building of Perry's fleet on Lake Erie, 1812-1813.
Pennsylvania Historical and Museum Commission, Harrisburg.

Tomikel, John C. and Vincent C. Schepps

1967 The geography and geology of Eric County, Pennsylvania. Pennsylvania Geological Survey, Harrisburg.

Wellejus, Edward

1980 Erie: Chronicle of a Great Lakes City. Windsor Publications, Woodland Hills, California.



- Whitman, Benjamin et al.
 - 1884 History of Erie County, Pennsylvania. Warner, Beers and Co., Chicago.
 - 1896 Nelson's Biographical Dictionary and Historical Reference Book of Eric County, Pennsylvania. S.B. Nelson, Eric, Pennsylvania.
- Whithoft, J.
 - 1965 Indian Prehistory of Pennsylvania. Pennsylvania Historical and Museum Commission, Harrisburg.
- Willey, G.R.
 - An Introduction to American Archaeology, Vol. 1:
 North and Middle America. Prentice-Hall, Inc.,
 Englewood Cliffs, New Jersey.
- Willey G.R. and P. Phillips

 1958 Method and Theory in American Archaeology. The University
 of Chicago Press, Chicago.
- Wolynec, Renata B.
 Personal Lecture Notes.
 - 1977 Preliminary Report, U.S. Steel Secondary Survey.
 Unpublished manuscript submitted to the Cleveland Museum of Natural History, Dr. David Brose, Project Director
 - 1982 Historic Sites Survey, City of Erie, Pennsylvania.

 Data Analysis Report and Final Report submitted to
 Pennsylvania Historical and Museum Commission by
 Northwest Institute of Research, Erie.
- Wolynec, Renata B., Bernard Werner, Charles C. Kolb and Joy B. Kolb 1978 Cultural Resources Overview of the Allegheny National Forest, Warren, Elk, Forest and McKean Counties, Pennsylvania. Submitted to USDA Forest Service, Eastern Region, Milwaukee.